



Bassett Creek Watershed Management Commission

Public Hearing and Regular Meeting

Thursday, May 18, 2023

8:30 a.m.

Council Conference Room

Golden Valley City Hall @ 7800 Golden Valley Rd.

MEETING AGENDA

1. CALL TO ORDER and ROLL CALL

2. **PUBLIC FORUM ON NON-AGENDA ITEMS** – *Members of the public may address the Commission about any item not contained on the regular agenda. A maximum of 15 minutes is allowed for the Forum. If the full 15 minutes are not needed for the Forum, the Commission will continue with the agenda. The Commission will take no official action on items discussed at the Forum, except for referral to staff or a Commissions Committee for a recommendation to be brought back to the Commission for discussion/action.*

3. APPROVAL OF AGENDA

4. CONSENT AGENDA (10 minutes)

- A. Approval of Minutes – April 20, 2023 Commission Meeting
- B. Acceptance of May 2023 Financial Report
- C. Approval of Payment of Invoices
 - i. Keystone Waters, LLC – April 2023 Administration
 - ii. Keystone Waters, LLC – April 2023 Administrative Expenses
 - iii. Barr Engineering – April 2023 Engineering Services
 - iv. Kennedy & Graven – March 2023 Legal Services
 - v. Redpath – April 2023 Accounting Services
 - vi. Triple D Espresso – Meeting Catering
 - vii. Finance and Commerce – Public Hearing Notice
 - viii. Metro Blooms – Lawns to Legumes Grant Reimbursement
 - ix. Stantec – WOMP Tasks
- D. Approval of Agreement with Metropolitan Council for 2023 Citizen Assisted Monitoring Program
- E. Approval of Resolution 23-05 to Not Waive Monetary Limits on Municipal Tort Liability
- F. Approval of 2022 Annual Report
- G. Approval of Golden Valley Country Club Improvements
- H. Approval of Waiver of Conflict for Commission Attorney

5. PUBLIC HEARING

- A. Receive Comments from Cities and Public on Proposed Minor Plan Amendment
 - i. Consider Extending Comment Period to August 8, 2023 per Hennepin County Request

6. BUSINESS

- A. Review Draft Feasibility Study for Ponderosa Woods Stream Restoration Project (ML-22) (40 min)
- B. Receive Update on Main Stem Lagoon Dredging Project (20 min)
- C. Consider Recommendations from Budget Committee (20 min)

- i. Review Memo with Notes on 2024 Operating Budget Development
- ii. Consider Adopting Fiscal Policy Regarding Investment Income

7. COMMUNICATIONS (10 minutes)

- A. Administrator’s Report
- B. Chair
- C. Commissioners
 - i. Report on Loppet Sustainability Fair
- D. TAC Members
 - i. Appoint Liaison for June 7th TAC Meeting
- E. Committees
- F. Legal Counsel
- G. Engineer
 - i. Update on Parkers Lake Chloride Reduction Project

8. INFORMATION ONLY (Information online only)

- A. BCWMC Administrative Calendar
- B. CIP Project Updates www.bassettcreekwmo.org/projects
- C. Grant Tracking Summary and Spreadsheet
- D. WCA Notices – Plymouth
- E. Wakes, Waves, Propeller Wash Webinar
- F. [CCX News Story on Sochacki Park Water Quality Improvement Project](#)

9. ADJOURNMENT

Upcoming Meetings & Events

- BCWMC Plan Steering Committee Meeting: Wednesday May 24th, 11:00 – 1:00, Brookview
- BCWMC Administrative Services Committee Meeting: Tuesday May 30th, 1:00 – 2:30 pm., Brookview
- BCWMC Technical Advisory Committee Meeting: Wednesday June 7th, 10:30 a.m., Brookview
- BCWMC Regular Meeting: Thursday June 15th, 8:30 a.m., Golden Valley City Hall



Bassett Creek Watershed Management Commission

AGENDA MEMO

Date: May 11, 2023

To: BCWMC Commissioners

From: Laura Jester, Administrator

RE: **Background Information for 5/18/23 BCWMC Meeting**

1. **CALL TO ORDER and ROLL CALL**
2. **PUBLIC FORUM ON NON-AGENDA ITEMS**
3. **APPROVAL OF AGENDA – ACTION ITEM with attachment**
4. **CONSENT AGENDA**
 - A. Approval of Minutes – April 20, 2023 Commission Meeting- ACTION ITEM with attachment
 - B. Acceptance of May Financial Report - ACTION ITEM with attachment
 - C. Approval of Payment of Invoices - ACTION ITEM with attachments (online) – I reviewed the following invoices and recommend payment.
 - i. Keystone Waters, LLC – April 2023 Administration
 - ii. Keystone Waters, LLC – April 2023 Administrative Expenses
 - iii. Barr Engineering – April 2023 Engineering Services
 - iv. Kennedy & Graven – March 2023 Legal Services
 - v. Redpath – April 2023 Accounting Services
 - vi. Triple D Espresso – Meeting Catering
 - vii. Finance and Commerce – Public Hearing Notice
 - viii. Metro Blooms – Lawns to Legumes Grant Reimbursement
 - ix. Stantec – WOMP Tasks
 - D. Approval of Agreement with Metropolitan Council for 2023 Citizen Assisted Monitoring Program – ACTION ITEM with attachment – Staff recommends approval of the annual agreement with Met Council to cooperate in the CAMP which uses volunteers to collect water samples and data on 10 BCWMC lakes. The Commission Legal Counsel reviewed the agreement. More information on the CAMP is found here: <https://metrocouncil.org/Wastewater-Water/Services/Water-Quality-Management/Lake-Monitoring-Analysis/Citizen-Assisted-Monitoring-Program.aspx>
 - E. Approval of Resolution 23-05 to Not Waive Monetary Limits on Municipal Tort Liability – ACTION ITEM with attachment – Commission Legal Counsel Anderson recommends the Commission take action (via resolution) to not waive monetary limits on municipal tort liability. This action is taken by the Commission annually.
 - F. Approval of 2022 Annual Report – ACTION ITEM with attachment – According to MN Rules Chapter 8410, the BCWMC is required to submit an annual report to the MN Board of Water and Soil Resources. Staff recommends approval of the attached report and direction to submit the report and post online.
 - G. Approval of Golden Valley Country Club Improvements – ACTION ITEM with attachment – The proposed project is in the Bassett Creek Main Stem subwatershed at the Golden Valley Country Club (GVCC). The proposed project includes bunker and green construction, grading, path realignments, and pond liner improvements resulting in 5.14 ac of disturbance, an increase of 0.01 ac of impervious surfaces, and mitigated floodplain impacts. Staff recommends conditional approval as shown in the attached memo.

- H. Approval of Waiver of Conflict for Commission Attorney – **ACTION ITEM with attachment** – *The Commission Attorney is requesting a waiver of conflict for his work on the Commission’s behalf related to development of an agreement with the City of Minneapolis regarding Bassett Creek Tunnel responsibilities. I recommend approval of the waiver. Please see complete explanation in the attached memo.*

5. PUBLIC HEARING

- A. Receive Comments from Cities and Public on Proposed Minor Plan Amendment – **DISCUSSION ITEM with attachment** - *At the March meeting, the Commission approved a 5-year CIP that requires a minor amendment to the watershed management plan to incorporate the Sochacki Park Water Quality Improvement Project into the CIP. At this hearing the Commission should consider comments from the public and its member cities on the proposed amendment.*
 - i. Consider Extending Comment Period to August 8, 2023 per Hennepin County Request – **ACTION ITEM with attachment** - *Although the 30-day comment period for the plan amendment ended on April 28th, due to the timing of Hennepin County Board meetings the County is requesting an extension of the comment period until August 8th. Staff recommends approval.*

6. BUSINESS

- A. Review Draft Feasibility Study for Ponderosa Woods Stream Restoration Project (ML-22) (40 min) – **DISCUSSION ITEM with attachment** (full document and appendices online) – *At the August 2022 meeting, the Commission approved the Commission Engineer’s proposal to conduct a feasibility study for this capital improvement program (CIP) project. The draft study is attached here along with the Commission Engineer’s recommendations for implementation. The Commission currently has \$475,000 earmarked for this project in its 2024 CIP. The Commission should discuss the options presented in the report. A revised report or more information can be brought to the June meeting. The Commission must set a maximum 2024 levy no later than its June meeting.*
- B. Receive Update on Main Stem Lagoon Dredging Project (20 min) – **INFORMATION ITEM with attachment** – *Although the dredging activities for the [Lagoon Dredging Project](#) (BC-7) wrapped up in March, staff discovered possible discrepancies between the amount of material reported to have been dredged and dredged amounts calculated through post-dredging surveys. The attached memo includes a status update on the project.*
- C. Consider Recommendations from Budget Committee (20 min) – **INFORMATION & ACTION ITEMS in one attachment** - *The BCWMC Budget Committee met April 3rd and May 1st to discuss BWCMC finances and to begin developing the 2024 operating budget. The committee offers the attached notes regarding the 2024 operating budget and a recommendation for updates to fiscal policies. A final proposed 2024 operating budget will be brought to the June meeting for approval to send to cities for review no later than July 1st.*
 - i. Review Memo with Notes on 2024 Operating Budget Development
 - ii. Consider Adopting Fiscal Policy Regarding Investment Income

7. COMMUNICATIONS (10 minutes)

- A. Administrator's Report – **INFORMATION ITEM with attachment**
- B. Chair
- C. Commissioners
 - i. Report on Loppet Sustainability Fair
- D. TAC Members
 - i. Appoint Liaison for June 7th TAC Meeting
- E. Committees
- F. Legal Counsel
- G. Engineer
 - i. Update on Parkers Lake Chloride Reduction Project

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Bassett Creek Watershed Management Commission

DRAFT Minutes of Regular Meeting

Thursday, April 20, 2023

8:30 a.m.

Golden Valley City Hall, 7800 Golden Valley Road

1. CALL TO ORDER and ROLL CALL

On Thursday, April 20, 2023 at 8:33 a.m. Vice Chair Welch brought the Bassett Creek Watershed Management Commission (Commission) to order and proceeded to chair the meeting in Chair Cesnik's absence.

Commissioners, city staff, and others present

City	Commissioner	Alternate Commissioner	Technical Advisory Committee Members (City Staff)
Crystal	<i>Absent</i>	Joan Hauer	Mark Ray
Golden Valley	Paula Pentel	<i>Vacant</i>	Eric Eckman
Medicine Lake	Clint Carlson	<i>Absent</i>	<i>Absent</i>
Minneapolis	Michael Welch	<i>Absent</i>	<i>Absent</i>
Minnnetonka	Maryna Chowhan	<i>Vacant Position</i>	<i>Absent</i>
New Hope	<i>Absent</i>	Jen Leonardson	Nick Macklem
Plymouth	<i>Absent</i>	Monika Vadali	Ben Scharenbroich, Amy Riegel
Robbinsdale	Wayne Sicora	Bob Stamos	Mike Sorensen
St. Louis Park	RJ Twiford	<i>Vacant</i>	Erick Francis
Administrator	Laura Jester, Keystone Waters, LLC		
Engineers	Karen Chandler and Jessica Olson, Barr Engineering		
Recording Secretary	<i>Vacant Position</i>		
Legal Counsel	Dave Anderson, Kennedy & Graven		
Presenters/ Guests/Public	None		

2. PUBLIC FORUM ON NON-AGENDA ITEMS

None.

3. APPROVAL OF AGENDA

MOTION: Commissioner Pentel moved to approve the agenda. Commissioner Carlson seconded the motion. Upon a vote the motion carried 9-0.

4. CONSENT AGENDA

Item 4J was removed from the consent agenda.

MOTION: Commissioner Pentel moved to approve the consent agenda as amended. Alternate Commissioner Hauer seconded the motion. Upon a vote the motion carried 9-0.

The following items were approved as part of the consent agenda.

- Approval of Minutes – March 16, 2023 Commission Meeting
- Acceptance of April 2023 Financial Report
- Approval of Payment of Invoices
- Approval to Appoint Plan Steering Committee Members
- Approval of Resolution of Appreciation for Alternate Commissioner Lawrence
- Approval of Agreement with Met Council for 2023 – 2024 Watershed Outlet Monitoring Program (WOMP)
- Approval of Amendment to Agreement with Stantec for WOMP Tasks
- Approval of Agreement with Three Rivers Park District for Medicine Lake Activities
- Conditional Approval of BNSF Bridge Replacement Project, Minneapolis

Chair Welch noted that Paula Pentel representing Golden Valley had been appointed primary commissioner and the alternate commissioner position was now vacant. He also introduced the new commissioner from St. Louis Park, RJ Twiford.

4J. Approval of Memorandum of Understanding for Sochacki Water Quality Improvement Project CIP Process

Upon request, Administrator Jester provided an overview of this item noting that at the March meeting, the Commission approved the addition of this CIP project to its 5-year CIP (if a minor Plan amendment is approved) with levy funding in 2024 and 2025. And, because this project's implementation schedule is more accelerated than the typical CIP process, commissioners directed staff to develop an agreement or formal understanding among the implementing parties (BCWMC, Three Rivers Park District, City of Golden Valley, City of Robbinsdale) to lay out the process and timing for feasibility study development, minor plan amendment, project ordering, design, etc. She reported the Memorandum of Understanding (MOU) was developed by the Commission Attorney and reviewed and approved by staff with each partner. She noted the MOU was approved by the Golden Valley City Council the previous evening and was on the agenda for the Three Rivers Park District Board of Commissioners that evening.

Chair Welch wondered if the MOU, which he noted was not a legally binding document, was needed at all. Commission Attorney Anderson noted that because Three Rivers Park District (TRPD) intends to invest funds into the project, the MOU helps them understand the BCWMC CIP process and the risks of investing funds into a project that might not ultimately be ordered by the Commission. Chair Welch indicated concern about the feasibility study being directed by TRPD. It was noted the study would be completed by the Commission Engineer and would include all BCWMC feasibility study criteria, building off the already completed comprehensive subwatershed analysis.

Chair Welch proposed that the BCWMC Administrator work with TRPD to have the feasibility study completed by the BCWMC with reimbursement from TRPD. There was discussion about how the MOU provides a step-by-step iteration of the CIP implementation process but does not legally bind the BCWMC to anything. Commissioner Sicora stated his support for the MOU as a roadmap for TRPD and noted the feasibility study direction is a critical piece of the process. There was also discussion about the logistical challenge to revising the MOU because it was approved by Golden Valley. There was discussion about developing a separate document clarifying the roles in developing the feasibility study. Chair Welch reiterated his desire for the Commission to direct the feasibility study rather than TRPD.

MOTION: Commissioner Carlson moved to approve the Memorandum of Understanding for the Sochacki Water Quality Improvement Project. Commissioner Pentel seconded the motion.

Discussion: Chair Welch noted that since the Commission will be asked to fund projects resulting from the study, the Commission, rather than TRPD, should direct the study. Commission Engineer Chandler noted that the Commission does not necessarily have to approve the feasibility study or approve implementation of the practices outlined in the final study. She noted the Commission still has ultimate discretion over what gets implemented with BCWMC CIP funding. It was also reported that Commission staff would be closely involved in the feasibility study throughout its development.

Chair Welch noted that it is important to consider what might go wrong in partnering situations like this, rather than assuming everything will work out exactly as intended. Commissioner Chowhan asked if there is any history among the parties that points to something nefarious happening in this situation. Chair Welch noted there is nothing specific unless you “cast a wide net.”

[TAC members Scharenbroich, Riegel, and Francis leave the meeting]

Golden Valley TAC member Eckman noted that TRPD is the entity risking their funding at this point and reminded commissioners that additional funding can be leveraged from the BCWMC CIP funds.

AMENDMENT TO MOTION: Chair Welch moved to amend the motion to add language to the MOU: “This MOU is a statement of mutual interest and cooperation. Nothing herein is legally binding. At such time as the Parties proceed to implement a specific capital project or program, or to formalize other coordination in a binding manner, they will enter into a written agreement that establishes legally binding roles, responsibilities and financial obligations.” Alternate Commissioner Hauer seconded the motion.

VOTE ON AMENDMENT: Upon a vote of the amendment, the motion failed 2-7 with Minneapolis and Robbinsdale voting in favor of the amendment and all other voting against.

VOTE ON ORIGINAL MOTION: Upon a vote of the original motion to approve the MOU as presented, the motion passed 8-1 with Minneapolis voting against the motion and all other voting in favor.

[Chair Welch called a 5-minute break.]

Upon return from the break, Chair Welch indicated his support for directing the Administrator and Commission Engineer to arrange for the Commission to perform the Sohacki Water Quality Improvement Project feasibility study and to prepare a separate agreement with TRPD for reimbursement to the Commission for the study. Commissioner Pentel noted that would be different than the MOU that was just approved. Chair Welch commented that having TRPD direct the study puts the Commission Engineer in a bad position. Commission Engineer Chandler noted that she and her colleagues are in a good position to perform the feasibility study because they fully understand the Commission’s feasibility requirements and the information the Commission likes to review before deciding on implementation. She noted the BCWMC Administrator would be closely involved with the study and any commissioners are welcome to be involved as well. Further, she reminded commissioners that the final study and proposed alternatives can be rejected by the Commission and not implemented with BCWMC CIP funds. Administrator Jester noted that the \$600,000 in BCWMC CIP funding slated for the project is only 25% of the estimated total project cost.

MOTION: Commissioner Welch moved to direct the Administrator and Commission Engineer to arrange for the Commission to perform the Sohacki Water Quality Improvement Project feasibility study and prepare a separate agreement with Three Rivers Park District for reimbursement. The motion did not receive a second.

5. BUSINESS

A. Review Draft Feasibility Study for Main Stem Bassett Creek Regent Ave to Golden Valley Rd Restoration Project (2024 CRM)

Administrator Jester provided a high level overview of the Commission’s CIP program, noting this project is similar to many other stream restoration projects implemented over the last several years. Commission Engineer Chandler

introduced Jessica Olson, Barr Engineering's lead engineer on the project.

Engineer Olson presented the results of the feasibility study for this project, noting the stream reach in the project area extends 7,000 feet between Regent Ave. and Golden Valley Road and meanders through neighborhoods and backyards. She reported that severe erosion with near vertical banks exists in many areas along the reach resulting in sediment and nutrient pollution loading in the creek and downstream, including through the recently dredged lagoons in Theodore Wirth Park.

Engineer Olson reviewed the project goals to reduce sediment and nutrient pollution by stabilizing and restoring streambanks, to preserve and enhance natural features, and prevent future channel erosion. She also reviewed the field investigations and desktop studies performed. Engineer Olson then described the prioritization process and metrics used to assign high, medium, or low priority levels to specific locations along the stream. Metrics included severity of erosion, public ownership/easement, access, trees, habitat improvement potential, existing infrastructure, etc.

Engineer Olson reported that all three concepts developed through the study would use a variety of stabilization and restoration techniques including re-grading and stabilization with bioengineering, stabilization with hard armoring, and installation of J-hook and cross vanes – each of which she described. She presented the following options and their pollutant removal impacts and estimated costs:

Option 1: Restore high priority areas only (3,830 linear feet), annually removing 41.8 lbs of total phosphorus (TP) for estimated cost of \$982,000

Option 2: Restore high and medium priority areas (5,425 linear feet), annually removing 64.8 lbs of TP for estimated cost of \$1,685,000

Option 3: Restore high, medium, and low priority areas (7,370 linear feet), annually removing 82.4 lbs of TP for estimated cost of \$2,118,000

There was discussion on how homeowners are contacted and engaged to determine their interest in participating in the project. It was noted that property access and property owner consent are crucial to the project. Golden Valley TAC member Eckman indicated that city staff contact every homeowner along the reach and noted there are varying degrees of private property, public property, and public easements along the reach. There was discussion about the possibility of contacting homeowners before the project is ordered to better understand the level of cooperation with private property owners. It was noted it is too early in the process for that type of effort. TAC member Eckman wondered if the cooperative agreement with the city could be flexible to allow for more or less funding reimbursed to the city depending on the number of cooperating homeowners. He noted that public engagement started through an online survey and "story map" along with the public open house and that there are always negotiations but typically only a small percentage of landowners need a significant amount of time and conversations.

Engineer Olson indicated the engineer's recommendation is to implement Option #1 due to the funding currently allocated in the CIP along with funding from the city. She noted that if more funding is available, they would recommend stabilizing more areas. She noted there are economies of scale: once you're mobilized and active in an area, the best use of funds is to complete all work at one time rather than returning several years later to stabilize areas previously skipped. Administrator Jester noted that a final decision is not needed at this meeting; that the 2024 maximum levy would be set at the June meeting.

Commissioner Welch noted that additional information on the accessibility of high priority areas is important to understand to make a good decision. He noted that a patchwork of implementation may undermine overall project effectiveness. There was more discussion about the areas in public ownership vs. private property, public property vs. easements, the existing "patchwork" of stabilization because some landowners have already done some stabilization projects on their own, and how a continuous length of stabilization is best.

Commissioner Carlson indicated his support for whatever option the City of Golden Valley wished to implement. He asked that the final feasibility study include a recommendation from the city. Commissioner Welch asked why the city is offering funding towards the project. TAC member Eckman indicated the funding would not be allocated for specific aspects of the project, but to enhance the overall project so more eroding sites could be restored.

Commissioner Welch noted that consideration should be given to locations where upstream land use might undermine future stability of an area. There was some discussion on using cost per pound pollutant removal as a metric for stream restoration projects. It was noted that the metric is calculated differently for stream restoration projects than for lake restoration projects, and that pollutant removals must be calculated for stream restoration projects if grant funding will be sought.

Commission Engineers will adjust some of the prioritization in the study in response to the discussion here and a final report will be brought to the May or June Commission meeting.

[Commissioner Carlson leaves the meeting.]

B. Discuss Development of Policy on Diversity, Equity, Inclusion, and Access

Administrator Jester noted that Commissioner Welch recommended that the Commission develop a policy on DEIA principles that identifies how and why equity principles are important to accomplishing Commission goals. She referenced an example of a policy from the Nine Mile Creek Watershed District (NMCWD) included with meeting materials. Commissioner Welch indicated that since the Commission is not an organization focused on social issues, it should connect its work to DEIA principles through a sound policy. He noted the simplicity of NMCWD's policy came after much discussion with their board.

Commissioner Pentel commented and Commissioner Chowhan agreed that the NMCWD policy was bland and she hoped for more overt language about reaching marginalized communities and including diverse and underrepresented voices. She suggested the Administrative Services Committee discuss. Administrator Jester noted that such a policy might also be developed through the 2025 Watershed Plan development process. There was consensus that the Administrative Services Committee should discuss this item.

C. 2025 Watershed Plan Updates

- i. Receive Update on Plan Development Activities
- ii. Review Report on Public Open House

Administrator Jester reviewed highlights of the progress on the 2025 Watershed Plan development; the scope and budget for which were approved in March 2022. She noted the Plan Steering Committee would start meeting in late May or early June, that she continues to try to engage with Minneapolis neighborhoods and underrepresented communities, that a Commission workshop would be held this summer to define and prioritize issues (with recommendations from the Plan Steering Committee), and that the Plan TAC, which includes agencies and technical partners, would also meet in the summer.

Administrator Jester also briefly reviewed the report on the public open house held in late February and highlighted some of the feedback received.

Commissioner Hauer indicated her appreciation for the map of CIP projects and would like to see the map included in the annual report.

6. COMMUNICATIONS

A. Administrator's Report

- i. Report on Bassett Creek Valley Summit – Presentations from the event available under “Bassett Creek Valley” at www.bassettcreekwmo.org/projects - Reported that the event was held March 29th with 35 attendees; Hennepin County Commissioner Fernando will convene the partners in June.
- ii. Update on Bryn Mawr Meadows Project Reimbursement – Reported that Minneapolis Park and Rec Board agreed to pay the Commission for additional design costs related to new city infrastructure and they will invoice the city
- iii. Volunteers Needed for Loppet Sustainability Fair – New St. Louis Park Commissioner, RJ Twifold,

volunteered to help at the fair.

- B. Chair – No report
- C. Commissioners
 - i. Appoint liaison to May 3rd TAC meeting – No TAC meeting on May 3rd after all
- D. TAC Members
 - i. Report on TAC Meeting March 29th – Administrator Jester reported that the TAC continued discussions about linear project standards, options, and pros/cons. The item will go to the Plan Steering Committee for discussion.
- E. Committees
 - i. Report on Budget Committee Meeting April 3 – Reviewed proposed 2024 budget and discussed where investment income should be utilized. Commissioner Sicora was appointed committee chair.
 - ii. Next Budget Committee Meeting May 1
 - iii. Administrative Services Committee Meeting April 25 – The committee will discuss the JPA and roles/responsibilities document
- F. Legal Counsel – No report
- G. Engineer - Engineer Chandler reported that the Bryn Mawr CIP project is continuing and still has construction cost savings. She also reported that Commission Engineers are evaluating the outcomes of the Lagoon Dredging Project and pay requests from the contractor.

7. INFORMATION ONLY (Information online only)

- A. BCWMC Administrative Calendar
- B. CIP Project Updates www.bassettcreekwmo.org/projects
- C. Grant Tracking Summary and Spreadsheet
- D. [2022 Lake Water Quality Report, Met Council](#)
- E. West Metro Water Alliance 2022 Report
- F. WCA Notices - Plymouth

8. ADJOURNMENT - The meeting adjourned at 11:00 a.m.

Bassett Creek Watershed Management Commission						
Statement of Financial Position						
				Capital Improvement Projects	General Fund	TOTAL
ASSETS						
Current Assets						
Checking/Savings						
		101 · Wells Fargo Checking		-761,505.06	911,002.86	149,497.80
		102 · 4MP Fund Investment		3,501,986.62	105,669.53	3,607,656.15
		103 · 4M Fund Investment		2,483,650.36	74,259.60	2,557,909.96
		Total Checking/Savings		5,224,131.92	1,090,931.99	6,315,063.91
Accounts Receivable						
		111 · Accounts Receivable		0.00	600.67	600.67
		112 · Due from Other Governments		52,806.40	-0.26	52,806.14
		113 · Delinquent Taxes Receivable		11,396.55	0.00	11,396.55
		Total Accounts Receivable		64,202.95	600.41	64,803.36
Other Current Assets						
		114 · Prepays		0.00	2,978.75	2,978.75
		116 · Undeposited Funds		0.00	1,500.00	1,500.00
		Total Other Current Assets		0.00	4,478.75	4,478.75
		Total Current Assets		5,288,334.87	1,096,011.15	6,384,346.02
TOTAL ASSETS				5,288,334.87	1,096,011.15	6,384,346.02
LIABILITIES & EQUITY						
Liabilities						
Current Liabilities						
Accounts Payable						
		211 · Accounts Payable		21,831.35	77,881.33	99,712.68
		Total Accounts Payable		21,831.35	77,881.33	99,712.68
Other Current Liabilities						
		212 · Unearned Revenue		438,823.00	0.00	438,823.00
		251 · Unavailable Rev - property t		11,396.55	0.00	11,396.55
		Total Other Current Liabilities		450,219.55	0.00	450,219.55
		Total Current Liabilities		472,050.90	77,881.33	549,932.23
		Total Liabilities		472,050.90	77,881.33	549,932.23
Equity						
		311 · Nonspendable prepaids		0.00	2,978.75	2,978.75
		312 · Restricted for improvements		4,562,582.00	0.00	4,562,582.00
		315 · Unassigned Funds		0.00	375,424.57	375,424.57
		32000 · Retained Earnings		1,198,999.33	108,188.52	1,307,187.85
		Net Income		-979,297.62	565,538.24	-413,759.38
		Total Equity		4,782,283.71	1,052,130.08	5,834,413.79
TOTAL LIABILITIES & EQUITY				5,254,334.61	1,130,011.41	6,384,346.02
UNBALANCED CLASSES				34,000.26	-34,000.26	0.00

Bassett Creek Watershed Management Commission
Statement of Revenues, Expenditures and Changes in Fund Balances - General

		Annual Budget	Apr 20 - May 18, 23	Feb 1 - May 18, 23	Budget Balance
Ordinary Income/Expense					
Income					
	411 · Assessments to Cities	617,430.00	0.00	617,430.00	0.00
	412 · Project Review Fees	80,000.00	23,500.00	30,000.00	50,000.00
	413 · WOMP Reimbursement	5,000.00	0.00	0.00	5,000.00
	414 · State of MN Grants		0.00	11,402.43	-11,402.43
	415 · Investment earnings		24,620.98	69,928.59	-69,928.59
	416 · TRPD Reimbursement	5,000.00	0.00	0.00	5,000.00
	417 · Transfer from LT & CIP	68,000.00	0.00	0.00	68,000.00
	Total Income	775,430.00	48,120.98	728,761.02	46,668.98
Expense					0.00
	1000 · Engineering				0.00
	1010 · Technical Services	145,000.00	9,112.50	46,079.50	98,920.50
	1020 · Development/Project Reviews	80,000.00	9,835.60	19,661.00	60,339.00
	1030 · Non-fee and Preliminary Reviews	30,000.00	1,419.50	5,322.50	24,677.50
	1040 · Commission and TAC Meetings	15,000.00	1,224.00	4,644.00	10,356.00
	1050 · Surveys and Studies	15,000.00	0.00	0.00	15,000.00
	1060 · Water Quality / Monitoring	105,000.00	5,161.11	8,805.74	96,194.26
	1070 · Water Quantity	9,000.00	472.50	2,101.96	6,898.04
	1080 · Annual Flood Control Inspection	15,000.00	0.00	1,612.50	13,387.50
	1090 · Municipal Plan Review	2,000.00	0.00	0.00	2,000.00
	1100 · Watershed Monitoring Program	27,000.00	3,200.25	8,991.76	18,008.24
	1110 · Annual XP-SWMM Model Updates	3,000.00	0.00	0.00	3,000.00
	1120 · TMDL Implementation Reporting	0.00	0.00	0.00	0.00
	1130 · APM/AIS Work	40,000.00	0.00	0.00	40,000.00
	1140 · Erosion Control Inspections	0.00	0.00	0.00	0.00
	1000 · Engineering - Other		0.00	0.00	0.00
	Total 1000 · Engineering	486,000.00	30,425.46	97,218.96	388,781.04
	2000 · Plan Development				0.00
	2010 · Next Gen Plan Development	53,250.00	4,122.50	22,421.11	30,828.89
	2000 · Plan Development - Other		0.00	0.00	0.00
	Total 2000 · Plan Development	53,250.00	4,122.50	22,421.11	30,828.89
	3000 · Administration				0.00
	3010 · Administrator	78,750.00	6,993.75	19,012.50	59,737.50
	3020 · MAWD Dues	7,500.00	0.00	0.00	7,500.00
	3030 · Legal	17,000.00	2,482.33	5,577.29	11,422.71
	3040 · Financial Management	14,540.00	1,075.00	4,065.00	10,475.00
	3050 · Audit, Insurance & Bond	18,700.00	0.00	0.00	18,700.00
	3060 · Meeting Catering	2,400.00	161.23	644.92	1,755.08
	3070 · Administrative Services	7,240.00	378.08	649.77	6,590.23
	3000 · Administration - Other		0.00	0.00	0.00
	Total 3000 · Administration	146,130.00	11,090.39	29,949.48	116,180.52
	4000 · Education				0.00
	4010 · Publications / Annual Report	1,000.00	623.50	623.50	376.50
	4020 · Website	1,600.00	0.00	0.00	1,600.00
	4030 · Watershed Education Partnership	18,350.00	0.00	3,500.00	14,850.00
	4040 · Education and Public Outreach	28,000.00	480.29	9,480.29	18,519.71
	4050 · Public Communications	1,100.00	29.44	29.44	1,070.56
	4000 · Education - Other		0.00	0.00	0.00
	Total 4000 · Education	50,050.00	1,133.23	13,633.23	36,416.77
	5000 · Maintenance				0.00
	5010 · Channel Maintenance Fund	25,000.00	0.00	0.00	25,000.00
	5020 · Flood Control Project Long-Term	35,000.00	0.00	0.00	35,000.00
	5000 · Maintenance - Other		0.00	0.00	0.00
	Total 5000 · Maintenance	60,000.00	0.00	0.00	60,000.00
	Total Expense	795,430.00	46,771.58	163,222.78	632,207.22
	Net Ordinary Income	597,430.00	1,349.40	1,182,968.24	-585,538.24
	Net Income	597,430.00	1,349.40	1,182,968.24	-585,538.24

Bassett Creek Watershed Management Commission					
Statement of Revenues, Expenditures and Changes in Fund Balances - Construction in Progress					
	Project Budget	Apr 20 - May 18, 23	Year to Date	Inception to Date Expense	Remaining Budget
Ordinary Income/Expense					
Income					
418 · Property Taxes		0.00	0.00		
BC2,3,8 · DeCola Ponds B&C Improve		0.00	0.00		
BC23810 · Decola Ponds/Wildwood Park		0.00	0.00		
BC5 · Bryn Mawr Meadows		0.00	0.00		
BC7 · Main Stem Dredging Project		0.00	0.00		
BGP2 · Bassett Creek Park & Winnetka		0.00	0.00		
CRM · Main Stem Cedar Lk Rd-Dupont		0.00	0.00		
ML12 · Medley Park Stormwater Treatment		0.00	0.00		
ML21 · Jevne Park Stormwater Mgmt		0.00	0.00		
NL2 · Four Seasons Mall Area		0.00	0.00		
SL1,3 · Schaper Pond Enhancement		0.00	0.00		
SL8 · Sweeny Lake Water Quality		0.00	29,815.50		
TW2 · Twin Lake Alum Treatment		0.00	0.00		
Total Income		0.00	29,815.50		
Expense					
2017CRM · CIP-Main Stem Cedar Lk Rd-Dupon	0.00	0.00	0.00	768,478.47	-768,478.47
2024CRM · CIP-BS Main Stem Restore	85,500.00	0.00	45,239.64	85,121.39	378.61
BC-238 · CIP-DeCola Ponds B&C	1,600,000.00	0.00	0.00	1,507,985.31	92,014.69
BC-2381 · CIP-DeCola Ponds/Wildwood Pk	1,300,000.00	0.00	0.00	62,789.39	1,237,210.61
BC-5 · CIP-Bryn Mawr Meadows	1,835,000.00	5,758.76	18,568.50	302,504.83	1,532,495.17
BC-7 · CIP-Main Stem Lagoon Dredging	2,759,000.00	13,599.31	923,993.77	1,511,452.19	1,247,547.81
ML-12 · CIP-Medley Park Stormwater	1,500,000.00	0.00	0.00	95,218.61	1,404,781.39
ML-20 · CIP-Mount Olive Stream Restore	178,100.00	0.00	0.00	43,157.42	134,942.58
ML-21 · CIP-Jevne Park Stormwater Mgmt	500,000.00	0.00	0.00	56,390.75	443,609.25
ML-22 · CIP-Ponderosa Wood Strm Restora	43,800.00	0.00	9,280.43	43,373.81	426.19
NL-2 · CIP-Four Seasons Mall	990,000.00	0.00	0.00	196,448.06	793,551.94
PL-7 · CIP-Parkers Lake Stream Restore	485,000.00	2,473.28	8,108.78	83,873.12	401,126.88
SL-1,3 · CIP-Schaper Pond	612,000.00	0.00	3,922.00	473,650.35	138,349.65
SL-8 · CIP-Sweeney Lake WQ Improvement	568,080.00	0.00	0.00	568,064.13	15.87
TMDL1 · TMDL Studies Revenue		0.00	0.00	0.00	0.00
TW-2 · CIP-Twin Lake Alum Treatment	163,000.00	0.00	0.00	91,037.82	71,962.18
Total Expense	12,619,480.00	21,831.35	1,009,113.12	7,360,693.97	5,258,786.03
Net Ordinary Income	-12,619,480.00	-21,831.35	-979,297.62	-7,360,693.97	
Net Income	-12,619,480.00	-21,831.35	-979,297.62		

Metropolitan Council Contract No. 23R007H

**INTERGOVERNMENTAL AGREEMENT BETWEEN THE
METROPOLITAN COUNCIL AND THE
BASSETT CREEK WATERSHED MANAGEMENT COMMISSION**

THIS AGREEMENT is made and entered into by and between the Metropolitan Council (the "Council") and the Bassett Creek Watershed Management Commission (the "Watershed"), each acting by and through its duly authorized officers.

THE ABOVE-NAMED PARTIES hereby agree as follows:

I. GENERAL SCOPE OF AGREEMENT

The Council and the Watershed agree to undertake a volunteer lake monitoring study in order to provide an economical method of broadening the water quality database on lakes in the Twin Cities Metropolitan Area.

II. SPECIFIC SCOPE OF SERVICES

2.01 Lake Monitoring Program. The Watershed and the Council agree to jointly undertake a volunteer lake monitoring program as specified below:

- a. **General Purposes of Program.** The volunteer lake monitoring program involves the use of citizen-scientist volunteers to monitor lakes in the Twin Cities Metropolitan Area. The volunteers will collect surface water samples which will be analyzed for total phosphorus (TP), total Kjeldahl nitrogen (TKN), and chlorophyll-a (CLA). In addition, the volunteers will measure surface water temperature, water transparency, and fill out a monitoring form that describes the lake and weather conditions at the time of the monitoring event. Lakes will be visited from April through October of 2023 (the "Monitoring Period") for the number of times and at the approximate intervals specified in paragraph (b) below. Each lake will be sampled at the location as indicated on the site location map provided by the Council. The Council will arrange for chemical analysis of the samples either through its own laboratory or an outside laboratory.
- b. **Specific Lakes Involved.** The following lakes and specific lake site(s) listed below will be involved in the Council's Citizen-Assisted Lake Monitoring Program (CAMP) in 2023.

Lake name	DNR ID#	Number of monitoring events	Approximate monitoring interval	Quantity of new kits
Cavanaugh	27-0110	1 to 7	Monthly	0
Lost	27-0103	8 to 14	Biweekly	0
Medicine, site 1	27-0104	8 to 14	Biweekly	0
Medicine, site 2	27-0104	8 to 14	Biweekly	0
Northwood	27-0627	1 to 7	Monthly	0
Parkers	27-0107	1 to 7	Monthly	0
Sweeney, site 1	27-0035-01	1 to 7	Monthly	0
Sweeney, site 2	27-0035-01	1 to 7	Monthly	0
Twin	27-0035-02	1 to 7	Monthly	0
Westwood	27-0711	1 to 7	Monthly	0

2.02 Watershed Responsibilities. The Watershed agrees that it will have sole responsibility for:

- a. Recruiting volunteers (who have access to a boat) to monitor the lakes the Watershed wishes to involve in the program as listed in section 2.01(b) above.
- b. Providing the Council and/or volunteers with needed lake information such as lake bathymetric maps and access locations.
- c. Paying for the laboratory analysis cost of the samples collected by volunteers which cost is included in the amounts specified in Article III below.
- d. Ensuring that the volunteers participate in the training program and follow CAMP methods and procedures.
- e. Ensuring that the volunteers fill out a monitoring form during each monitoring event.
- f. Picking up the samples and the lake monitoring forms from their volunteers and delivering those items to the Watershed's central storage location. The Watershed will be responsible for providing the central storage location. The central storage location can be a Council facility, but the Watershed will be required to deliver the samples and monitoring forms to this facility. The samples are required always to be frozen.
- g. Storing its volunteers' samples until picked up by Council staff. The samples are required always to be frozen.

- h. Maintaining, storing, and restocking its monitoring kits.
- i. Delivering and picking up its monitoring kits to and from their volunteers.

2.03 Council Responsibilities. The Council agrees that it will:

- a. Organize the survey.
- b. Provide training for the volunteers.
- c. Pick up the samples and lake monitoring forms from the Watershed’s central storage location and deliver them to the laboratory at approximately 2-month intervals starting in June.
- d. Review the results of the monitoring data.
- e. Prepare a final report containing the physical, chemical, and biological data obtained during the Monitoring Period and a brief analysis of the data.
- f. Provide quality control by collecting lake samples from random lakes involved in the volunteer program. The resulting parameter values will then be compared to the volunteers’ results to determine if any problems exist involving the volunteer's monitoring activities and what should be done to correct the problem.
- g. Provide and deliver to the Watershed the expendable monitoring items (e.g. sample containers, labels, filters, aluminum sheets, zip-style plastic bags, and lake monitoring forms). The expendable monitoring items will be delivered in the weeks preceding the start of the monitoring season. The cost of the expendable monitoring items is included in the annual participation fee.

III. COMPENSATION; METHOD OF PAYMENT

3.01 Payment to Council. For all labor performed and reimbursable expenses incurred by the Council under this agreement during the Monitoring Period, the Watershed agrees to pay the Council the following amounts per lake site listed in section 2.01(b). The participation fee will be billed based on the quantity of monitoring events actually monitored or sampled.

Number of Monitoring events	Participation Fee (excludes monitoring equipment)
8 to 14	\$760
1 to 7	\$380
0	\$0

For lake sites requiring monitoring equipment, the cost for a kit of monitoring equipment is \$225 per kit.

3.02 Payment Schedule. Payment of the total amount owing to the Council by the Watershed shall be made within 30 days of the date of the invoice. An invoice specifying the amount owed by the Watershed will be sent under separate cover after the end of the monitoring period.

3.03 Additional Analyses. The total amount specified in paragraph 3.01 does not include the cost of any additional analyses requested by the Watershed, such as analysis of bottom samples. The Council will carry out any such additional analyses at the request of the Watershed and subject to the availability of Council resources for carrying out such analyses. The Council will bill the Watershed after the end of the Monitoring Period for any such additional analyses at the Council's actual cost, and the Watershed will promptly reimburse the Council for any such costs billed. The costs for additional analyses are provided in Exhibit A.

3.04 Replacement of Durable Equipment. The total amount specified in paragraph 3.01 does not include the cost of replacing durable monitoring equipment, such as thermometers, Secchi disks, filter holders, hand pumps, graduated cylinders, sampling jugs, forceps, and tote boxes. The Council will provide and deliver durable monitoring equipment that needs replacement upon request from the Watershed. The Council will bill the Watershed for any such replaced durable monitoring equipment at the Council's actual cost, and the Watershed will promptly reimburse the Council for any such costs billed.

IV. GENERAL CONDITIONS

4.01 Period of Performance. The services of the Council will commence on April 1, 2023, and will terminate on March 30, 2024, or following work completion and payment, whichever occurs first.

4.02 Amendments. The terms of this agreement may be changed only by mutual agreement of the parties. Such changes will be effective only on the execution of written amendment(s) signed by duly authorized officers of the parties to this agreement.

4.03 Watershed Personnel. Laura Jester, or such other person as may be designated in writing by the Watershed, will serve as the Watershed's representative and will assume primary responsibility for coordinating all services with the Council.

Laura Jester - Administrator
Bassett Creek Watershed Management Commission
c/o Keystone Waters
16145 Hillcrest Lane
Eden Prairie, MN 55346
952-270-1990

4.04 Council's Contract Manager. The Council's Contract Manager for purposes of administration of this agreement is Brian Johnson, or successor, or such other person as may be

designated in writing by the Council. The Council's Contract Manager will be responsible for coordinating services under this agreement. However, nothing in this agreement will be deemed to authorize the Contract Manager to execute amendments to this agreement on behalf of the Council.

Brian Johnson, or successor
Metropolitan Council
2400 Childs Road
St. Paul, MN 55106
651-602-8743

4.05 Equal Employment Opportunity; Affirmative Action. The Council and the Watershed agree to comply with all applicable laws relating to nondiscrimination and affirmative action. In particular, the Council and the Watershed agree not to discriminate against any employee, applicant for employment, or participant in this study because of race, color, creed, religion, national origin, sex, marital status, status with regard to public assistance, membership or activity in a local commission, disability, sexual orientation, or age; and further agree to take action to assure that applicants and employees are treated equally with respect to all aspects of employment, including rates of pay, selection for training, and other forms of compensation.

4.06 Liability. Each party to this agreement shall be liable for the acts and omissions of itself and its officers, employees, and agents, to the extent authorized by law. Neither party shall be liable for the acts or omissions of the other party or the other party's officers, employees or agents. Nothing in this agreement shall be deemed to be a waiver by either party of any applicable immunities or limits of liability including, without limitation, Minnesota Statutes, chapter 466 (Municipal Tort Claims).

4.07 Copyright. No reports or documents produced in whole or in part under this agreement will be the subject of an application for copyright by or on behalf of the Council or Watershed.

4.08 Termination of Agreement. The Council and the Watershed will both have the right to terminate this agreement at any time and for any reason by submitting written notice of the intention to do so to the other party at least 30-calendar days prior to the specified effective date of such termination. In the event of such termination, the Council shall retain a pro-rata portion of the amounts provided for in Article III, based on the number of monitoring events occurring for each lake before termination versus the total monitoring events specified for each lake. The balance of the amounts will be refunded by the Council to the Watershed.

4.09 Force Majeure. The Council and the Watershed agree that the Watershed shall not be liable for any delay or inability to perform this agreement, directly or indirectly caused by, or resulting from, strikes, labor troubles, accidents, fire, flood, breakdowns, war, riot, civil commotion, lack of material, delays of transportation, acts of God or other cause beyond reasonable control of Council and the Watershed.

4.10 Audits. Pursuant to Minn. Stat. Section 16C.05, Subd. 5, the parties agree that the books, records, documents, and accounting procedures and practices relevant to this agreement

are subject to examination by either party and the state auditor or legislative auditor, as appropriate, for at least six years from the end of this agreement.

4.11 Relationship of Parties and their Employees. Nothing contained in this agreement is intended, or should be construed, to create the relationship of co-partners or a joint venture between the Council and the Watershed. No tenure or any employment rights including worker's compensation, unemployment insurance, medical care, sick leave, vacation leave, severance pay, retirement, or other benefits available to the employees of one of the parties, including indemnification for third party personal injury/property damage claims, shall accrue to employees of the other party solely by the fact that an employee performs services under this agreement.

4.12 Severability. If any part of this agreement is rendered void, invalid or unenforceable such rendering shall not affect the remainder of this agreement unless it shall substantially impair the value of the entire agreement with respect to either party. The parties agree to substitute for the invalid provision a valid provision that most closely approximates the intent of the invalid provision.

IN WITNESS WHEREOF, the parties have caused this agreement to be executed by their duly authorized representatives on the dates set forth below. This agreement is effective upon final execution by, and delivery to, both parties.

**BASSETT CREEK WATERSHED
MANAGEMENT COMMISSION**

METROPOLITAN COUNCIL

By: _____

By: _____

Name: _____

Name: _____

Its: _____

Its: Water Resources Assistant Manager

Date: _____

Date: _____

By: _____

Name: _____

Its: _____

Date: _____

EXHIBIT A

Metropolitan Council Environmental Services Laboratory Prices for Additional Analyses		
Parameter	Laboratory Code	Price (per sample)
Nutrients (TP & TKN)	NUT-AHLV NUT-ALV	\$15.50
Chlorophyll	CLA-TR-CS CLA-CAMP	\$15.50
Phosphorus	P-AHLV P-ALV	\$15.50
Chloride	CL-AV2	\$10.00
Ortho-phosphorus	ORTHO-AV	\$12.00
Hardness	HARD-AV	\$12.00
Ca, Mg, + Hardness via calculation	HARD-OESV	\$16.00
Alkalinity	ALK-AV2	\$15.50
Sulfate	SO4-ICV	\$15.00
Metals (Cd, Cr, Cu, Pb, Ni, Zn)	MET-MSV2	\$48
Minerals Suite (Ca, K, Mg, Na) + Hardness via calc	MIN-MSV2	\$32
Individual minerals (e.g. Fe)	XX-MSV2	\$8.00 (per element)
Individual metals	XX-MSV2	
A parameter not on this list		Contact the Council's Contract Manager for specific pricing.

BASSETT CREEK WATERSHED MANAGEMENT COMMISSION
RESOLUTION NO. 23-05

RESOLUTION AUTHORIZING EXECUTION OF WAIVER FORM RELATING TO TORT
LIMITS FOR LIABILITY INSURANCE AND NOT WAIVING SUCH TORT LIMITS

WHEREAS, the Bassett Creek Watershed Management Commission (“Commission”) is a joint powers watershed management organization established by the cities of Crystal, Golden Valley, Medicine Lake, Minneapolis, Minnetonka, New Hope, Plymouth, Robbinsdale, and St. Louis Park in accordance with Minnesota Statutes, section 103B.211; and

WHEREAS, the Commission is insured for tort liability matters by the League of Minnesota Cities Insurance Trust (“LMCIT”); and

WHEREAS, as part of its liability insurance coverage with LMCIT, the Commission is required to elect annually whether to waive the statutory tort liability limits stated in Minn. Stat. § 466.04; and

WHEREAS, staff has recommended that the Commission not waive the tort cap limits in order to mitigate the Commission’s tort liability as permitted by law; and

WHEREAS, a decision to not waive the tort cap limits reasonably protects the Commission and limits its potential liability while allowing an individual claimant to recover damages as provided by law.

NOW, THEREFORE, BE IT RESOLVED by the Bassett Creek Watershed Management Commission that the Commission Administrator is authorized to execute the LMCIT Liability Coverage Waiver Form on behalf of the Commission by indicating that the Commission elects not to waive the statutory limitation on tort liability.

Adopted this 18th day of May, 2023.

Chair

ATTEST:

Secretary



Bassett Creek Watershed Management

NOTICE OF PUBLIC HEARING

Proposed Minor Plan Amendment to the

Bassett Creek Watershed Management Commission's

September 2015 Watershed Management Plan

NOTICE IS HEREBY GIVEN that the Bassett Creek Watershed Management Commission (BCWMC) will hold a public hearing during its regular meeting on

Thursday, May 18, 2023 at 8:30 a.m.

Golden Valley City Hall

7800 Golden Valley Road, Golden Valley MN 55427

Interested persons are invited to attend. The purpose of the public hearing is to answer questions about the proposed minor plan amendment to the BCWMC's *September 2015 Watershed Management Plan* and to hear public testimony and comments of member cities regarding the proposed amendment. The proposed minor plan amendment involves revisions to the Capital Improvement Program (CIP) (Table 5-3):

- Adding Sochacki Water Quality Improvement Project (BC-14). This project is within the Three River Park District's Sochacki Park in the cities of Robbinsdale and Golden Valley. The project would implement a suite of BMPs identified in a recent [subwatershed analysis](#) to reduce phosphorus loading from the surrounding watershed by an estimated 67 lbs./year; reduce erosion and sedimentation; improve water quality in three degraded DNR wetlands and downstream in Bassett Creek; improve wetland health; improve buffers and habitat; and improve recreation and education opportunities.

Although not requiring a formal amendment, Table 5-3 will also be updated to:

- Remove Beacon Heights 2nd Addition Stormwater Improvement Project (ML-24) due to infeasibility within available space and topography.
- Remove Bassett Creek Park Water Quality Improvement Project (BC-11) due to low priority and lack of partners to implement.
- Update implementation schedules and budgets of existing projects.

You can view all proposed changes to Capital Improvement Program (Table 5-3) of the *2015 Watershed Management Plan* and a fact sheet for the proposed Sochacki Water Quality Improvement Project on the BCWMC website at: www.bassettcreekwmo.org/document/wmp-plans.

A levy of an ad valorem property tax by Hennepin County on property within the Bassett Creek Watershed is the proposed method of payment for up to \$600,000 of the Sochacki Water Quality Improvement Project. The project has additional funding partners and grant funding opportunities.

Bassett Creek Watershed Management Commission

7800 Golden Valley Road | Golden Valley, MN 55427 | www.bassettcreekwmo.org | Established 1968

Crystal | Golden Valley | Medicine Lake | Minneapolis | Minnetonka | New Hope | Plymouth | Robbinsdale | St. Louis Park



Hennepin County
Public Works

Environment and Energy Department
701 Fourth Avenue South, Suite 700
Minneapolis, Minnesota 55415-1842

Item 5Ai.
BCWMC 5-18-23

612-348-3777, Phone
612-348-8532, Fax
hennepin.us/environment

April 25, 2023

Catherine Cesnik, Chair
Bassett Creek Watershed Management Commission
c/o Laura Jester, Watershed Administrator
16145 Hillcrest Lane
Eden Prairie, MN 55346

Re: Minor Plan Amendment

Dear Chair Cesnik:

I request that Hennepin County's review deadline for the proposed plan amendment be extended to August 8, 2023. The need for the extension is due to the County's 2023 meeting dates, formal review process, the lead time required to place the item on the County Board's meeting schedule.

The Board Action requesting formal approval of the Minor Plan Amendment will be heard by the Hennepin County Board of Commissioners Administration Committee on August 1, 2023 and by the full Board on August 8, 2021.

Sincerely,

A handwritten signature in black ink, appearing to read 'Karen Galles', with a small asterisk below the signature.

Karen Galles
Supervisor, Land & Water Unit

Cc: Laura Jester, Watershed Administrator
Steve Christopher, BWSR

Bassett Creek Watershed Management Commission



2022 Annual Report

Crystal • Golden Valley • Medicine Lake • Minneapolis
Minnetonka • New Hope • Plymouth • Robbinsdale • St. Louis Park



May 2023

Bassett Creek Watershed Management Commission 2022 Annual Report

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Cover photo: Carp removal on Sweeney Lake in 2022.

Bassett Creek Watershed Management Commission

Executive Summary: 2022 Annual Report



2022 Activities & Achievements

In 2022, the BCWMC continued its work toward fulfilling its mission:
Stewardship of Water Resources to Protect and Enhance Our Communities.

Significant Improvements in Sweeney Lake

Each year, the BCWMC implements one or more major capital improvement program (CIP) projects to protect or improve water resources. In 2022, the [Sweeney Lake Water Quality Improvement Project](#) was completed. The project was partially funded by a Federal 319 grant from Minnesota Pollution Control Agency and resulted in a significant improvement in the lake's clarity and water quality. In fact, the lake will be removed from the list of impaired waters in 2024!



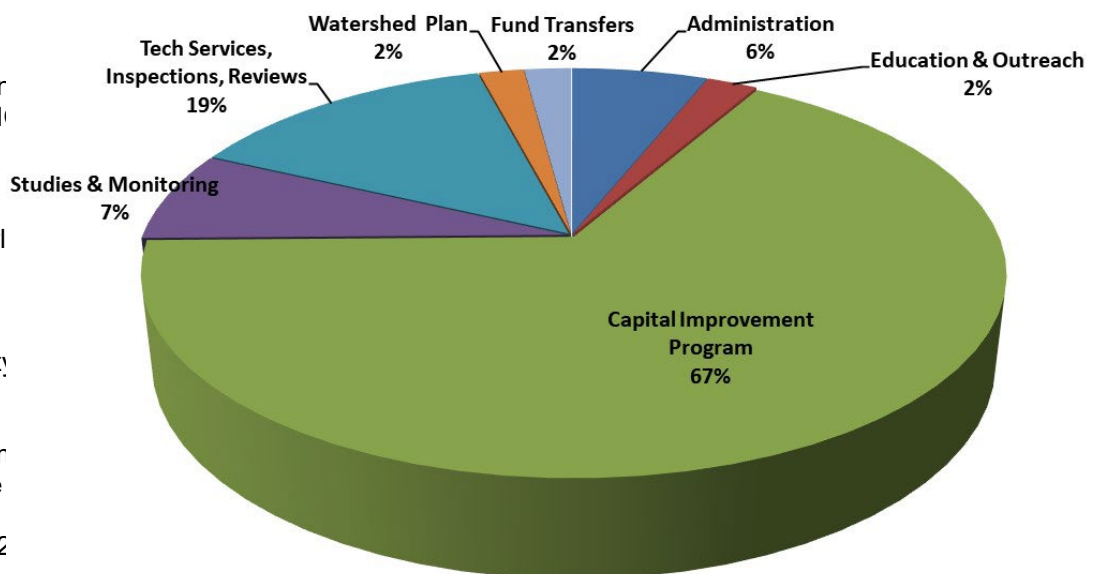
The Sweeney Lake project was a multi-pronged approach that included controlling curly-leaf pondweed, removing over 600 carp from the lake and Schaper Pond immediately upstream, and performing a two-phase alum treatment to lock nutrients in the lakebed. Homeowners around the lake and the City of Golden Valley also contributed to water quality improvements by permanently turning off aerators that resuspended nutrients, and implementing stormwater improvements in the lake subwatershed.



Budget

In FY 2022, the BCWMC spent approximately \$847,000 on activities and programs and \$1.58 million on capital projects. BCWMC income included \$566,000 from member cities, over \$100,000 in grants and reimbursements, and nearly \$90,000 in development review fees. Another \$1.7 million was collected through a Hennepin County tax levy on watershed residents for the capital projects. For an itemization or more information on the BCWMC's 2022 expenditures, see the 2022 Operating Budget in Appendix A or the financial audit online.

2022 BCWMC Expenses



2022 Highlights

The Bassett Creek Watershed Management Commission (BCWMC) is governed by a board composed of representatives from each of the nine member cities: Crystal Golden Valley Medicine Lake Minneapolis Minnetonka New Hope Plymouth St. Louis Park and Robbinsdale. Representatives are appointed by their cities and serve three-year terms.

Construction Progress in Bryn Mawr Meadows Park

In 2022, project designs were completed and construction began on the [Bryn Mawr Meadows Water Quality Improvement Project](#) in Minneapolis. This project is in partnership with the Minneapolis Park and Rec Board and the City of Minneapolis. In conjunction with the Park Board's redevelopment of the park, the BCWMC project includes diverting runoff from a 45-acre residential area west of the park into new stormwater ponds within the park for a total phosphorus reduction of 30 pounds per year. A Clean Water Fund grant is partially funding the BCWMC project.



Monitoring: In 2022, the BCWMC continued to assess its lakes and streams through a robust water monitoring program:

- Assessed the health of **Northwood and Lost Lakes** by collecting data on water quality, plankton, and aquatic plants. Final reports are expected summer 2023.
- Performed the first year of a 2-year monitoring project on **Plymouth Creek** including collecting data on flow, water quality, habitat, and macroinvertebrates. The BCWMC partnered with the City of Plymouth and Three Rivers Park District on that work.
- Performed continuous stream flow and water quality monitoring on **Bassett Creek at the Watershed Outlet Monitoring Program** station in partnership with the Met Council
- Coordinated **volunteers on eight lakes** to collect water samples and data through the Met Council's Citizen Assisted Monitoring Program.

• Hennepin County Chloride Initiative & Low Salt, No Salt Minnesota Campaign

The BCWMC continued its focus on chloride reduction and over salting in 2022 by working with other partners concerned about over salting.

The BCWMC started coordinating the Hennepin County Chloride Initiative (HCCI) in 2021 and led the development of the Low Salt, No Salt Minnesota marketing campaign (LSNS). The LSNS campaign was finalized in 2022 and includes multiple tools for use by watersheds and cities to engage with and educate targeted audiences and properties. Through market-based research, a professional marketing firm developed a campaign title, logo, tagline, presentation, outreach materials, and professionally produced videos. The program is slated to be used by LGUs and the MPCA. www.low-salt-no-salt-mn.org.

HCCI is a partnership of all eleven watershed organizations in Hennepin County, the County, the Minnesota Pollution Control Agency, and many cities from across the county. HCCI's goal was to reduce the amount of chloride entering our waterways from the overuse of winter deicing materials. HCCI used Clean Water Funds through a state grant to collectively address over salting by pooling ideas and resources and promoting common messages and strategies. The HCCI won the Minnesota Watershed's Program of the Year Award in December 2022.





Memorandum

To: Bassett Creek Watershed Management Commission (BCWMC)
From: Barr Engineering Co. (Barr) (Jim Herbert, PE; Gabby Campagnola)
Subject: Item 4G: Golden Valley Country Club Improvements (Regrassing and Hole 8)– Golden Valley, MN
BCWMC May 18, 2023 Meeting Agenda
Date: May 10, 2023
Project: 23270051.58 2023 2317

4G Golden Valley Country Club Improvements (Regrassing and Hole 8) – Golden Valley, MN BCWMC 2023-10

Summary:

Proposed Work: Bunker and green construction, grading, regrassing, cart path realignment, and pond liner improvements

Project Proposer: Golden Valley Country Club

Project Schedule: Construction June–September 2023

Basis for Review at Commission Meeting: Work in the floodplain

Impervious Surface Area: Increase 0.01 acres

Recommendation for Commission Action: Conditional approval

General Project Information

The proposed project is in the Bassett Creek Main Stem subwatershed at the Golden Valley Country Club (GVCC) in Golden Valley. The proposed project includes bunker and green construction, grading, regrassing (essentially reseeding with another type of grass), cart path realignments, and pond liner improvements resulting in 5.14 acres of disturbance. The proposed project creates 0.32 acres of new and fully reconstructed impervious surfaces, and an increase of 0.01 acres of impervious surfaces 0.31 acres (existing) to 0.32 acres (proposed). The submittal included three separate plan sets prepared by three different organizations. The GVCC control structure, part of the Bassett Creek Flood Control Project is also located along Bassett Creek on the GVCC property.

Floodplain

The proposed project includes work in the BCWMC (Bassett Creek Main Stem) 100-year floodplain. The 1% annual-chance (base flood elevation, 100-year) floodplain elevation of Bassett Creek Main Stem varies across the GVCC property. The 100-year floodplain elevation at the proposed floodplain work area is 874.8 feet NAVD88. The January 2023 BCWMC Requirements for Improvements and Development Proposals (Requirements) document states that projects within the floodplain must maintain no net loss in floodplain storage and no increase in flood level at any point along the trunk system (managed to at least a precision of 0.00 feet). The cut/fill report provided by the applicant indicated the proposed project will

result in approximately 376 cubic yard of floodplain fill and 999 cubic yards of compensating storage, resulting in a net gain of approximately 623 cubic yards of floodplain storage.

Wetlands

The City of Golden Valley is the local government unit (LGU) responsible for administering the Wetland Conservation Act; therefore, BCWMC wetland review is not required. The City should review the project for conformance to its buffer requirements.

Rate Control

The proposed project does not create one or more acres of net new impervious surfaces; therefore, BCWMC rate control review is not required.

Water Quality

The proposed project does not create one or more acres of net new impervious surfaces; therefore, BCWMC water quality review is not required.

Erosion and Sediment Control

The proposed project results in more than 10,000 square feet of land disturbance; therefore, the proposed project must meet the BCWMC erosion and sediment control requirements. Proposed temporary erosion and sediment control features include silt fence, wattles (similar to a sediment log), and inlet protection. Permanent erosion and sediment control features include stabilization with seed and sod.

Recommendation for Commission Action







Conditional approval based on the following comments:

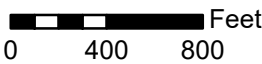
1. The plans prepared by Norby Golf Course Design indicate a net cut of 50 cubic yards in the floodplain, WSB plans and memo indicate a net cut of 212 cubic yards in the floodplain, and the WSB cut/fill report indicate a net cut of 623 cubic yards. Cut in the floodplain must be clarified and be consistent between submitted plans, computations and supplemental materials.
2. Plans must be revised to show the BCWMC floodplain elevation in the proposed grading area.
3. Hole 6 and Hole 10 fairway grading must not result in fill in the floodplain.
4. The total area of new and fully reconstructed impervious must be consistent between the application and drawings. Note the inconsistencies:
 - a. The BCWMC application form indicates 13,879 square feet of new and fully reconstructed impervious for cart path repairs/realignment.
 - b. *The Regrassing Project* prepared by Norby Golf Course Design indicates 17,325 square feet of new and fully reconstructed impervious for cart path repairs/realignments.
 - c. *Golf Course Improvements* prepared by Norby Golf Course Design indicates 10,570 square feet of new and fully reconstructed impervious for cart path repairs/realignments.
5. Elevation labels must be included on the contours to help review floodplain and grading.

6. Sheet 5 of the SWPPP shows detail for rock construction entrance, if this is proposed for the project then the location must be shown on the plans.
7. Installation details for wattles must be included on the SWPPP.
8. There appears to be inconsistencies for proposed erosion control protection locations and methods between the submitted plan sets. For example, the extent of silt fence on Hole 8 in plans prepared by WSB do not match the plans submitted by Duinick. In addition, the plans prepared by Norby Golf Course Design call for wattles, while plans prepared by Duinick call for silt fence and have an installation detail for silt fence. Erosion control plans should be comprehensive for all phases of the proposed project and be consistent for all plan sets.
9. The Hole 8 Plan prepared by Norby Golf Course Design (part of *Golf Course Improvements*) calls out 310 linear feet of wattles, but the wattles location is not shown.
10. The following notes must be included on the SWPPP to meet the following BCWMC requirements:
 - a. Require that soils tracked from the site be removed from all paved surfaces within 24 hours of discovery throughout the duration of construction.
 - b. Require that all exposed soil areas must be stabilized as soon as possible, but in no case later than 7 days after the construction activity has temporarily or permanently ceased.
 - c. Require a temporary vegetative cover consisting of a suitable, fast-growing, dense grass seed mix spread at a minimum at the MnDOT-specified rate per acre. If temporary cover is to remain in place beyond the present growing season, two-thirds of the seed mix shall be composed of perennial grasses.



Project Location

-  Project Location
-  Municipality
-  BCWMC Legal Boundary
-  Major Subwatershed
-  BCWMC Hydrologic Boundary
-  Bassett Creek



BCWMC 2023-10
 GOLDEN VALLEY COUNTRY
 CLUB IMPROVEMENTS
 (REGASSING & HOLE 8)
 Golden Valley, MN
LOCATION MAP



Offices in Fifth Street Towers
150 South Fifth Street, Suite 700
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Affirmative Action, Equal Opportunity
Employer

Item 4H.
BWCMC 5-18-23

DAVID T. ANDERSON
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May 11, 2023

VIA E-MAIL ONLY

Bassett Creek Watershed Management Commission
c/o 16145 Hillcrest Lane
Eden Prairie, MN 55346
Email: laura.jester@keystonewaters.com

Re: Request for Waiver of Conflict (Flood Control Project)

Dear Commissioners:

I was recently asked to assist the Commission in the development of an agreement between the Commission and the City of Minneapolis ("City") related to long-term maintenance of the Bassett Creek Flood Control Project and the new tunnel located in the City ("Project"). One or more of my colleagues at my law firm occasionally represent the City on highly specialized public finance and real estate projects unrelated to the Project, and so I felt it necessary to remind you of this relationship and request a waiver regarding my representation in this capacity. Some of you might recall that the Commission approved a similar request when I worked on the agreements associated with the Bryn Mawr Water Quality Improvement Project.

The factual and legal issues that I anticipate will arise related to the Project are wholly unrelated to the specialized work that my colleagues do for the City. Additionally, I am confident that I can provide competent and diligent representation to the Commission on the Project.

If you do not anticipate a problem with me representing the Commission with regard to the Project, please sign a copy of this waiver letter below and return to me. If you have any questions, please do not hesitate to let me know. As always, I appreciate the opportunity to provide legal services to the Commission.

Very truly yours,

KENNEDY & GRAVEN, CHARTERED

/s/ David T. Anderson

David T. Anderson

The undersigned hereby waives the above-described conflict of interest and consents to representation by Kennedy & Graven for all matters related to the aforementioned Project.

Dated: _____

BCWMC Chair

Dated: _____

BCWMC Secretary

Feasibility Report for Ponderosa Woods Stream Restoration Project—**D R A F T**

Plymouth, Minnesota



Prepared for
Bassett Creek Watershed Management Commission

May 2023



Feasibility Report for Ponderosa Woods Stream Restoration Project

May 2023

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1.0 Executive Summary

1.1 Project Overview

The Ponderosa Woods stream channel is a short stream with intermittent flows that is a tributary to the west side of Medicine Lake in the City of Plymouth. The stream drains about 4 square miles of land with mixed uses. The stream channel begins northeast of the intersection of Kirkwood Lane North and 18th Avenue North and flows northeast into West Medicine Lake Park, where it meets up with Plymouth Creek, flows through two water quality ponds, and then flows into Medicine Lake (Figure 1-1). During the spring, summer, and fall the naturally ephemeral stream generally has fairly consistent low flows with high, flashy flows during rain events due to the substantial watershed area. The upstream section of the stream channel has tall stream banks, minimal access to a floodplain, and receives stormwater runoff from surrounding neighborhoods; the downstream section of the stream channel, by comparison, has lower stream banks and access to a floodplain. In the winter the stream freezes over. The stream is not considered a public watercourse by the MN Department of Natural Resources (MnDNR). However, the City of Plymouth identified this eroding channel as contributing sediment and nutrient loads to Medicine Lake.

Medicine Lake is included on the Minnesota Pollution Control Agency's (MPCA) 303d list of impaired waters for mercury, chlorides, and excess nutrient (e.g., total phosphorus). The United States Environmental Protection Agency (EPA) approved a Total Maximum Daily Load (TMDL) Study for the excess nutrients impairment in 2011. Stabilizing the streambanks along the Ponderosa Woods stream channel would reduce pollutant loading, including total phosphorus, to Medicine Lake.

This feasibility study evaluates the potential restoration of the Ponderosa Woods stream channel. The length of the stream within the project area extends just over 1,100 feet. This feasibility study identifies four stream reaches and three stormwater side-channels for evaluation. All stream reaches are straight with little to no sinuosity. There are many areas with significant amounts of woody debris from fallen trees, with substantial areas of invasive buckthorn along the stream banks and throughout the riparian area.

The Ponderosa Woods Stream Restoration Project is included in the BCWMC's current CIP (2024 ML-22), with construction scheduled for 2024. The project would stabilize stream banks to reduce erosion along the existing stream, improve and restore in-stream and riparian habitat, and improve water quality and reduce sediment and phosphorus entering Medicine Lake. Additional stormwater features would also trap sediment from road runoff, decreasing the amount of sediment flowing into the stream reach.

1.2 Project Alternatives

This feasibility study evaluates alternatives for the stabilization of the Ponderosa Woods Stream Restoration project area. Each alternative considers the following stream stabilization methods:

- Hard armoring bank and channel stabilization methods:
 - Rock riprap channel or banks (including lengthening and deepening upstream plunge pool at the stormwater outfall)
 - Rock toe, consisting of boulders buried and extending partially up the toe of the bank
 - Replacement of existing stormwater side-channel structure on 18th Ave with a sump for trapping sediment, trash and other debris
- Bioengineering bank and channel stabilization methods:
 - Stream bank and channel grading
 - Stormwater side-channel grading
 - Coir blanket with live stakes and plantings
 - Vegetated swale for stormwater side-channels
 - In-channel grade controls (boulder cross vanes)
 - Re-meander the stream channel
- Vegetation and woody debris measures:
 - Removing in-channel woody debris
 - Removing fallen, dead, and dying trees including ash, box elder, and cottonwood; ash trees are a primary focus for removal since many are in poor health and affected by the Emerald Ash Borer, which was first confirmed in the area in 2015
 - Removing invasive buckthorn
 - Restoring vegetated buffer
 - Opening the tree canopy, which may include select healthy tree removal

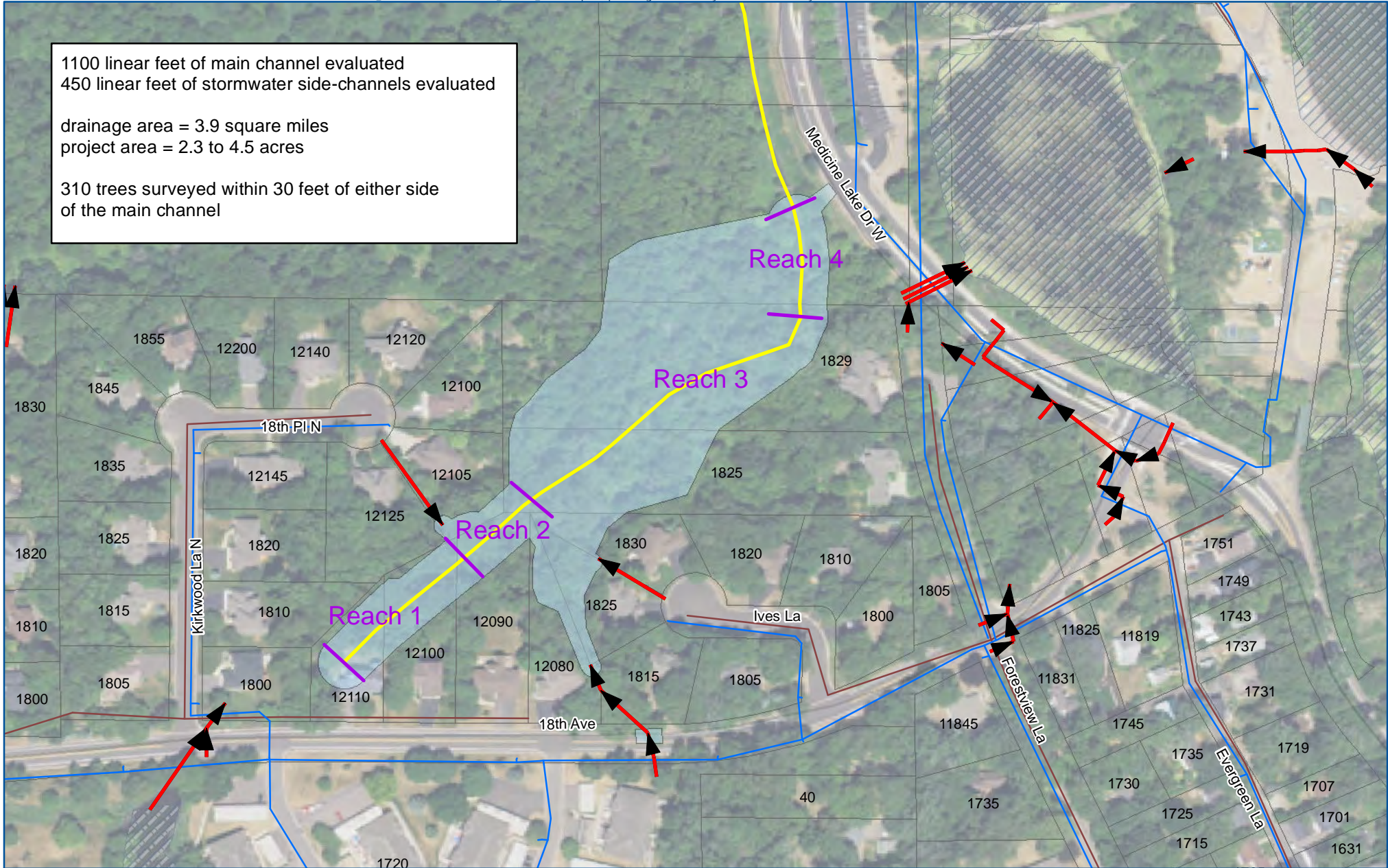
Table 1-1 provides a summary of alternatives, including brief description and estimated costs, pollutant load reductions, and tree removals. Buckthorn removal is approximately 11% to 22% of total project costs depending on the alternative.

Section 5.0 provides more detailed discussion of the measures considered and alternatives evaluated (Alternatives 1, 2, and 3), and Section 8.0 includes more information on Alternative 1.5, which is the same as Alternative 1 plus additional buckthorn removal.

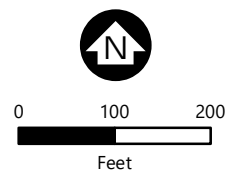
1100 linear feet of main channel evaluated
450 linear feet of stormwater side-channels evaluated

drainage area = 3.9 square miles
project area = 2.3 to 4.5 acres

310 trees surveyed within 30 feet of either side of the main channel



- Main Stream Path
- Reach Boundary
- Storm Sewer
- Watermain
- Sanitary Sewer
- Largest Proposed Project Area
- Ponds and Wetlands
- Parcels



Imagery: USDA, 2021

PROJECT AREA
Ponderosa Woods Stream
Restoration Feasibility Study
BCWMC

FIGURE 1-1

Table 1-1 Feasibility Study Alternatives Summary

Alternative	Description	Project Cost Estimate ⁽¹⁾	Annualized Cost ⁽²⁾	TP Loading		TSS Loading		Trees Removed	
				Load Reduction (lb/yr)	Cost/lb/yr Reduced ⁽³⁾	Load Reduction (lb/yr)	Cost/lb/yr Reduced ⁽³⁾	Healthy	Dead, Dying, and Fallen
Alternative 1 – Small Footprint Design	Stream stabilization using bioengineering techniques, bank and channel grading, and in-channel controls. This alternative also includes installation of and reinforcement of existing riprap. Buckthorn removal occurs at or near streambanks and tributary stormwater channels. Tributary stormwater channels are regraded and stabilized with riprap. Alternative 1 prioritizes minimal land disturbance and tree removal.	\$252,000 (\$202,000–\$328,000)	\$17,000	7.4	\$2,300	14,770	\$1.15	27	11
Alternative 1.5 - Small Footprint Design (with added buckthorn removal)	Alternative 1 techniques plus the same buckthorn removal as Alternative 2.	\$297,000 (\$238,000–\$387,000)	\$20,000	7.4	\$2,700	14,770	\$1.35	27	11
Alternative 2 – Medium Footprint Design	Alternative 1 techniques but with more hard armoring; plus two additional acres of buckthorn removal and additional overbank grading.	\$429,000 (\$344,000–\$558,000)	\$27,000	7.4	\$3,650	14,770	\$1.83	34	13
Alternative 3 – Large Footprint Design	Alternative 1 and 2 techniques plus a stream channel re-meander in the downstream reach. The re-meandered section includes grading and bioengineering stabilization throughout.	\$506,000 (\$405,000–\$658,000)	\$34,000	10.8	\$3,150	21,580	\$1.58	72	28

1.3 Relationship to Watershed Management Plan

The Bassett Creek Watershed Management Commission (BCWMC) included the Ponderosa Woods Stream Restoration project area in its Capital Improvement Plan (CIP), based on the following “gatekeeper” policy from the BCWMC Plan. The items in bold italics directly apply to these projects.

110. The BCWMC will consider including projects in the CIP that meet one or more of the following “gatekeeper” criteria.
- Project is part of the BCWMC trunk system (see Section 2.8.1, Figure 2-14 and Figure 2-15 of the report)
 - ***Project improves or protects water quality in a priority waterbody***
 - ***Project addresses an approved TMDL or watershed restoration and protection strategy (WRAPS)***
 - Project addresses flooding concern

The BCWMC will use the following criteria, in addition to those listed above, to aid in the prioritization of projects:

- Project protects or restores previous Commission investments in infrastructure
- Project addresses intercommunity drainage issues
- ***Project addresses erosion and sedimentation issues***
- ***Project will address multiple Commission goals (e.g., water quality, runoff volume, aesthetics, wildlife habitat, recreation, etc.)***
- Subwatershed draining to project includes more than one community
- Addresses significant infrastructure or property damage concerns

The BCWMC will place a higher priority on projects that incorporate multiple benefits and will seek opportunities to incorporate multiple benefits into BCWMC projects, as opportunities allow.

This project meets several gatekeeper criteria—the project will improve water quality as its primary goal by reducing the amount of sediment and pollutants that enter Medicine Lake. This project will also help address multiple BCWMC goals by enhancing water quality and improving wildlife habitat.

1.4 Project Impacts

Section 6.0 discusses the potential impacts resulting from the restoration and stabilization project, which include tree removals and temporary wetland impacts. Tree removal will be limited to only those necessary to complete the project along with more expansive buckthorn removal, depending on the alternative chosen. Woody debris from the removed trees will not be re-used on site as part of stream bank stabilization measures. Because this is an intermittent flowing stream with a lower water level, the woody material would rot since it would not be continuously submerged below the water level.

The proposed stream stabilization project will result in reduced stream bank erosion and, therefore, reduced sediment and phosphorus loading to the downstream water quality ponds and Medicine Lake.

Section 6.0 presents the estimated existing erosion rates and pollutant loading along with pollutant load reductions expected with each alternative.

1.5 Recommendations

Based on review of the project impacts; feedback from residents, representatives of the City of Plymouth, and regulators; the overall project costs and benefits; and existing stream restoration improvement needs; the Commission Engineer recommends implementing either Alternative 1 or 1.5: stream stabilization with a combination of bioengineering and hard armoring, habitat improvement with dead and dying tree removal and buckthorn clearing, stormwater sump structure for trapping sediment, and significant woody debris removal). Alternative 1.5 is the same as Alternative 1, but with additional buckthorn removal (similar level of buckthorn removal as in Alternatives 2 and 3).

The table below shows the planning-level estimated costs for the recommended alternatives. The Commission Engineer recommends the BCWMC use the opinion of cost identified in this study to develop a levy request for the recommended project and that it proceed to design and construction through an agreement with the City of Plymouth. The BCWMC CIP funding (ad valorem tax levied by Hennepin County on behalf of the BCWMC) will be the sole source of funding for this project. Following the typical BCWMC CIP process and through an agreement with the BCWMC, the City would design and construct the project and then be reimbursed for all eligible project costs as completed.

Table 1-2 Recommended Stream Restoration Alternatives Cost Summary

Alternative Description	Project Cost Estimate ⁽¹⁾	Annualized Cost ⁽²⁾	TP Loading		TSS Loading	
			Load Reduction (lb/yr)	Cost/lb/yr Reduced ⁽³⁾	Load Reduction (lb/yr)	Cost/lb/yr Reduced ⁽³⁾
Alternative 1 (Small Footprint Design)	\$252,000 (\$202,000 - \$328,000)	\$17,000	7.4	\$2,300	14,770	\$1.15
Alternative 1.5 (Small Footprint Design with additional buckthorn removal)	\$297,000 (\$238,000 - \$387,000)	\$20,000	7.4	\$2,700	14,770	\$1.35

- 1) A Class 4 screening-level opinion of probable cost, as defined by the American Association of Cost Engineers International (AACE International), has been prepared for these alternatives. The opinion of probable construction cost provided in this table is based on the Commission Engineer's experience and qualifications and represents our best judgment as experienced and qualified professionals familiar with the project. The cost opinion is based on project-related information available to the Commission Engineer at this time and includes a conceptual-level design of the project. It includes 20% project contingency and 30% for planning, engineering, design, and construction administration. The lower bound is assumed at -20% and the upper bound is assumed at +30%.
- 2) Assumed to be 15% of the total project cost for annual maintenance, plus replacement cost associated with major repairs and the initial project cost distributed evenly over a 30-year project lifespan. The City pays for the annual maintenance costs.
- 3) Annualized cost divided by estimated annual pollution load reduction.

4.0 Stakeholder Input

4.1 Project Kickoff Meeting with BCWMC and City of Plymouth Representatives

A project kickoff meeting with BCWMC representatives (Administrator, Commissioner Cesnik, Alternate Commissioner Vadali, Engineer) and City of Plymouth staff was conducted virtually on October 3, 2022. At this meeting, we reviewed the project scope and schedule, reviewed key tasks, and identified data needs. Discussions also included preferences regarding preliminary stream stabilization concepts.

4.2 Technical Stakeholder/Agency Meeting

A technical stakeholder meeting was held virtually on December 12, 2022. Attendees included representatives from the City of Plymouth, BCWMC (Administrator, Engineer), US Army Corps of Engineers (USACE), MnDNR, and the MPCA. The attendees reviewed the design concepts at the Ponderosa Woods Stream Restoration project site and provided technical and permitting feedback. Items discussed included:

- Review of the project schedule and meeting objectives.
- Review of the erosion sites and other creek deficiencies.
- Review of water quality issues.
- Review and discussion of the design concepts.
- Discussion of permit requirements for potential wetland and stream impacts.
- Discussion of potential habitat improvements.

The meeting provided an opportunity to review the project site and discuss options, considering ideal restoration scenarios and practical aspects of maintenance and construction. The USACE expressed their preference to include all aquatic resources and stream type as part of the wetland delineation review. A field wetland delineation would likely be required by the local government unit (LGU) to verify the wetland boundaries and inform project design and permitting. Additional discussion on the upcoming federal change for the northern long-eared bat was also included and has been tracked by the Commission Engineer; Section 3.0 of this report is updated with the most recent information as of April 2023. Additional specific outcomes of the discussion are incorporated into the appropriate sections below.

4.3 Public Meeting

A public stakeholder meeting was held at Plymouth City Hall on February 13, 2023 with 5 members of the public attending the meeting (3 different property owners). During the meeting, preliminary design concepts were presented to local residents. Attendees asked questions and provided some of their observations of the creek, tree and invasive buckthorn removal, and general project areas. There were no significant concerns raised about the project and the restoration methods proposed; however, most of the public's comments and support focused on improving the vegetated habitat of the project area by

removal of diseased and hazardous trees as well as invasive buckthorn. General discussions included tree removal, invasive buckthorn removal, habitat improvements, water quality benefits, and project cost.

All members of the public who attended supported removing invasive buckthorn, unhealthy trees (including green ash), and additional trees, where needed to open the tree canopy and get more light into the understory to increase understory vegetation. Nearby homeowners use this area for recreational purposes. The project area currently has a lower-quality forested environment with significant amounts of invasive buckthorn and green ash, and a minimal understory, which negatively affect the stream and riparian habitats, as well as the recreational use of the area. Based on discussions with the homeowners, they would support a larger amounts of tree and invasive buckthorn removal than currently proposed. In follow-up discussions with Plymouth staff, the proposed buckthorn removal areas were adjusted to include more area south of the stream and less area on the north of the stream. However, the overall buckthorn removal area was not increased in size due to costs and to keep the focus of the project on the stream restoration rather than forest management. The City of Plymouth will assist with buckthorn management on City parcels during or after construction.

Section 6.0 includes further discussion and information related to homeowner comments, homeowner impacts, and the need for additional easements.

5.0 Potential Improvements

This section provides a summary of the alternatives considered for the Ponderosa Woods stream restoration site and includes a general description of the stabilization techniques evaluated for the stream restoration.

5.1 Description of Potential Improvements

There are many possible combinations of alternatives that would provide stabilization benefits throughout the entire project area. This section provides an overview of the stabilization concepts reviewed by the project stakeholders in this feasibility study. Detailed design efforts later in the project implementation may identify and include stabilization techniques or combinations of techniques that are not specifically included in this feasibility study.

5.1.1 Hard Armoring vs. Bioengineering Stream Stabilization Techniques

Techniques for stream stabilization generally fall into two categories: hard armoring and bioengineering (also known as soft armoring). Hard armoring techniques include the use of engineered materials such as stone (riprap or boulders), gabions, or concrete to stabilize slopes and prevent erosion. Bioengineering techniques employ biological and ecological concepts to control erosion, using vegetation or a combination of vegetation and construction materials, including logs and boulders. Techniques that do not use vegetative material but are intended to achieve stabilization of natural flow patterns and create in-stream habitat, such as boulder or log vanes, are generally included under the umbrella of bioengineering.

Hard armoring and bioengineering techniques present different challenges, costs, and benefits for stream stabilization design. Hard armoring methods are viewed as standard and time-tested and typically have a longer life span due to the permanence of the materials used. Hard armoring is usually effective in preventing erosion where it is installed; however, placement must consider downstream impacts, understanding that the armoring may push the erosive stresses downstream. Hard armoring typically requires little maintenance; however, if the armoring fails, maintenance or replacement can be expensive, particularly if the armoring materials need to be removed from the site.

Bioengineering techniques maintain more of a stream's natural function and provide better habitat and a more natural appearance than hard armoring. If vegetation is well-established this approach can also be self-maintaining. Due to biodegradation of construction materials and variable vegetation establishment success, it is typically assumed that bioengineering installations have a shorter life span and may need more frequent (although less expensive) maintenance, particularly as the vegetation is becoming established. Compared to hard armoring, the success of bioengineering techniques is more dependent on the skill of the designer and installer—sometimes making bioengineering construction more expensive.

Technical stakeholders for this feasibility study, including the USACE, expressed a preference for bioengineering over hard armoring for stream stabilization where possible. In addition, the current BCWMC Watershed Management Plan (see Section 4.2.5 of Reference (1)) states: "recognizing their


benefits to biodiversity and more natural appearance, the BCWMC will strive to implement stream and stream bank restoration and stabilization projects that use soft armoring techniques (e.g., plants, logs, vegetative mats) as much as possible and wherever feasible.” However, the BCWMC also recognizes that soft armoring techniques can require significant tree removal, which can be a negative consequence, depending on the type and condition of trees in the project area. Therefore, the BCWMC seeks to balance soft armoring with preserving desirable tree species.





5.1.2 Stream Stabilization Techniques Evaluated

The Commission Engineer evaluated several techniques for stabilizing the stream within the project areas. Both hard armoring and bioengineering methods were considered; a mix of both methods types are included in the following design alternatives, but all have a focus on more bioengineering methods. Rock riffles or boulder cross vanes could be used to stabilize the channel bed and introduce flow variability and an improved riffle/pool sequence. The deeper pools will improve habitat, especially during winter months. The use of grading and installation of live stakes on eroding banks would stabilize these areas from further sediment loss and improve habitat within the pools that have become overly shallow; too many live stakes may create more shade than desired and decrease some of the benefits created by opening the tree canopy with the desired design alternative. Vegetation establishment in the overbanks would include enhanced buffers with native vegetation that have deeper roots for improved sediment-loss reduction and new riparian habitat. The installation of rock toe and additional riprap, along with the reconstruction of existing riprap will help stabilize the stream banks..

Table 5-1 summarizes the project restoration techniques included in this feasibility study. We also considered using woody debris for root wads, log vanes, and toe wood; however, with the low water levels, the wood would decompose and would not provide the same longevity of bank stability that it would under submerged conditions.

Table 5-1 Project Design Elements

Design Element	Purpose	Ecological Benefits
<p>Rock Toe Bank Stabilization (hard armoring element)</p> 	<p>Boulders buried and extending partially up the toe of the bank to protect the bank from high velocity flows and bank erosion.</p>	<p>Prevents sediment deposition into the stream channel, improving water quality for aquatic species.</p>

Design Element	Purpose	Ecological Benefits
<p>Rock Riffles (bioengineering element)</p> 	<p>Gravel or cobble-sized material installed in the stream bed to create natural flow patterns and to control stream bed elevations.</p>	<p>The variety in flow and channel substrate size provides habitat diversity for aquatic species.</p>
<p>Cross Vanes (bioengineering element)</p> 	<p>Boulders buried in the stream bed and extending partially ("vanes") or entirely across the stream ("cross vanes") to achieve one or more of the following goals: re-direct flows away from banks, encourage sediment deposition in selected areas, and control stream bed elevations</p>	<p>Scour pools develop over time near the vane, which provide habitat diversity for species that prefer pools to faster flowing in-channel habitat.</p>
<p>Coir Blanket/Live Stakes Bank Stabilization (bioengineering element)</p> 	<p>Long-lasting, biodegradable fabric with seeding and live stakes to stabilize slopes and encourage establishment of root systems for further stabilization</p>	<p>The vegetation, once established, will increase the diversity of the riparian habitat, and improve aquatic habitat.</p>
<p>Vegetated Buffer (includes removal of trees, invasive buckthorn, and in-channel debris) (bioengineering element)</p> 	<p>Establish vegetation along a stream bank or overbank area to stabilize bare soils and increase resistance to fluvial erosion. Remove unhealthy trees and invasive species, including buckthorn, to open the tree canopy to allow understory vegetation to grow and stabilize the banks. Remove in-channel debris to stabilize banks and prevent additional erosion.</p>	<p>Using trees, shrubs, and a seed mix of grass and forbs provides a diverse array of vegetation and habitat types. Allows for more naturalized aesthetics, with emphasis on native species. Removal of in-channel debris prevents erosive flows from being routed into the bank and also eliminates locations for sediment accumulation, improving water quality for aquatic species.</p>

5.2 Concepts Evaluated

This section provides a summary of the three conceptual designs developed and evaluated for the Ponderosa Woods Stream Restoration project and presented at the public outreach meeting February 13, 2023. Table 5-2 provides a summary of the alternatives evaluated and further discussed in the following sections.

Table 5-2 Feasibility Study Alternatives Summary

Alternative	Description
Alternative 1 – Small Footprint Design	Stream stabilization using bio-engineering techniques, bank and channel grading, and in-channel controls. This alternative also includes installation of and reinforcement of existing riprap. Buckthorn removal occurs at or near streambanks and tributary stormwater channels. Tributary stormwater channels are regraded and stabilized with riprap. Alternative 1 prioritizes minimal land disturbance and tree removal.
Alternative 2 – Medium Footprint Design	Alternative 1 techniques but with more hard armoring; plus two additional acres of buckthorn removal and additional overbank grading.
Alternative 3 – Large Footprint Design	Alternative 1 and 2 techniques plus a stream channel re-meander in the downstream reach. The re-meandered section includes grading and bioengineering stabilization throughout.

Section 5.0 summarizes the impacts of the conceptual designs, Section 6.0 summarizes the project modeling and estimated water quality improvements, and Section 7.0 provides a summary of the cost for each alternative.

5.3 Analyzed Alternatives for Ponderosa Woods Stream Restoration Project

5.3.1 Alternative 1— Small Footprint Design

The primary focus of the Alternative 1 design is stabilizing the stream with a bioengineering approach, which will decrease erosion as well as phosphorus and total suspended solids (TSS) loading, improve water quality, improve stream and downstream habitat, and protect single-family residences. Figure 5-1 shows a representation of the proposed features of Alternative 1, which is the smallest project footprint of the three alternatives. This alternative includes the following design components:

- Remove large in-channel debris, which will decrease localized bank and scour erosion as well as sediment accumulation. These areas have over-widened banks, which destabilize the banks and decrease the floodplain connectivity. The banks will be graded in such a way as to narrow the over-widened channel, so the stream flows are able to access the floodplain; accessing the floodplain slows the water flow via the vegetation and decreases downstream flooding potential.

Restoring floodplain connectivity also increases the system resiliency and ability to manage and slow flows during storm events.

- Minimize tree removal (especially of larger, healthier trees). This alternative proposes removal of 27 healthy trees to make way for construction work and open up the tree canopy to allow sunlight into the understory, enhancing growing conditions for the understory vegetation, which then assists with stabilizing the banks. Details of replanting trees and other restoration will be determined during the final design process. Removed species (with range of diameters) include American elm (6 to 16 inches), ash (7 to 16 inches), box elder (6 to 18 inches), buckthorn (6 to 8 inches), cottonwood (23 to 33 inches), and maple (6 to 7 inches). The majority of the trees to be removed are less than 12 inches in diameter. Note, the tree survey only includes trees within approximately 40 feet of the stream centerline. Additional tree survey will be necessary if the construction work expands beyond this area. Appendix D contains a tabulation of trees removed by each species.
- Remove invasive buckthorn within 40 feet on either side of the stream channel and 15 feet on either side of the stormwater side-channels within the project area. Buckthorn is pervasive in this area, so removal will allow additional sunlight and space into the understory, which will allow native species to establish, improve habitat in the project area, and improve bank stability along the stream channel. Buckthorn removal methods will be determined during design.
- Expand and re-stabilize the plunge pool at the upstream end of the stream channel to stabilize the banks and build in additional resiliency during high flow events, which can minimize bank erosion that is occurring near single-family residential homes. This area is near single-family residences, so further stabilizing this section of the stream will also protect the nearby homes.
- Manage stormwater side-channels with regrading and riprap stabilization to guide water more directly to the stream channel. One location will also include a sediment trap sump structure (replacing an existing structure), which will minimize sediment deposition from the stream channel and its transport to Plymouth Creek and Medicine Lake.
- Stabilize targeted bank and channel locations with bioengineering (vegetated) and hard armoring (stone) methods, which will decrease erosion. These methods include grading and placing either coir blankets with live stakes or rock toe to improve stream bank stability and decrease erosion. This alternative includes more bioengineered than hard armored methods.
- Install boulder cross vanes to limit erosion of the channel bed, redirect flow from the banks, and create flow diversity.
- Reinforce existing downstream riprap area to protect the downstream homeowner's property. This property is near the nearly 90-degree bend in the stream; this part of the stream can experience higher velocities and increased erosion potential. Additional riprap reinforcement will further protect this home.

5.3.2 Alternative 2— Medium Footprint Design

The primary focus of the Alternative 2 design is stabilizing the stream with hard armoring and bioengineering, which will decrease erosion as well as phosphorus and total suspended solids (TSS) loading, improve water quality, improve stream and downstream habitat, and protect single-family residences. Figure 5-2 shows a representation of the proposed features of Alternative 2, which has a medium-sized project footprint compared to the other alternatives. Alternative 2 aims to provide additional habitat improvement through increased buckthorn removal, and to use more hard armoring than Alternative 1. It is similar to Alternative 1, except it also includes the following design components:

- Minimize tree removal (especially of larger, healthier trees), but with slightly more tree removal compared to Alternative 1. This alternative proposes removal of 34 healthy trees to make way for construction work and open up the tree canopy to allow sunlight into the understory, increasing the understory vegetation, which then assists with stabilizing the banks. Details of replanting trees and other restoration will be determined during the final design process. Removed species (with range of diameters in inches) include American elm (6 to 16 inches), ash (7 to 24 inches), basswood (8 to 13 inches), box elder (6 to 18 inches), buckthorn (6 to 8 inches), cottonwood (23 to 33 inches), and maple (6 to 7 inches). The majority of the trees to be removed are less than 12 inches in diameter. Note, the tree survey only includes trees within approximately 40 feet of the stream centerline. Additional tree survey will be necessary if the construction work expands beyond this area. Appendix D contains a tabulation of trees removed by each species.
- Remove additional invasive buckthorn. Buckthorn removal will extend beyond 40 feet on either side of the stream channel on both the north and south sides of the downstream half of the reach within the project area. This additional buckthorn removal provides additional riparian habitat improvements. Buckthorn removal methods will be determined during design.
- Stabilize targeted bank and channel locations with bioengineering (vegetated) and hard armoring (stone) methods, which will decrease erosion. These methods include grading and placing either coir blankets with live stakes or rock toe to improve stream bank stability and decrease erosion. This alternative includes more hard armoring than bioengineering methods, compared to Alternative 1. There is also some additional grading in the upstream reach to establish a 10-foot bench on the left bank, which can help reduce velocities during higher flow storm events.

5.3.3 Alternative 3— Large Footprint Design

The primary focus of the Alternative 3 design is stabilizing the stream with a bioengineering approach, which will decrease erosion as well as phosphorus and total suspended solids (TSS) loading, improve water quality, improve stream and downstream habitat, and protect single-family residences. Figure 5-3 shows a representation of the proposed features of Alternative 3, which has the largest project footprint compared to the other alternatives. Alternative 3 aims to provide additional resiliency to the management of the stream flows by re-meandering a portion of the reach (and therefore elongating the stream reach), and to use more bioengineering than hard armoring bank stabilization methods. Alternative 3 is similar to Alternative 2, except it also includes the following design components:

- Additional tree removal to construct the re-meandering of the stream channel, resulting in the most tree removal of the three alternatives. This alternative proposes removal of 72 healthy trees to make way for construction work and open up the tree canopy to allow sunlight into the understory, increasing the understory vegetation, which then assists with stabilizing the banks. Details of replanting trees and other restoration will be determined during the final design process and will prioritize protecting larger, healthier trees. Removed species (with range of diameters in inches) include American elm (6 to 16 inches), ash (7 to 24 inches), basswood (8 to 13 inches), box elder (6 to 18 inches), buckthorn (6 to 8 inches), cottonwood (23 to 33 inches), and maple (6 to 7 inches). The majority of the trees to be removed are less than 12 inches in diameter. Note, the tree survey only includes trees within approximately 40 feet of the stream centerline. Additional tree survey will be necessary if the construction work expands beyond this area. Appendix D contains a tabulation of trees removed by each species.
- Re-meander a downstream section of the stream channel with bioengineering stabilization methods along the re-meandered stream channel section. Re-meandering this section of the stream channel increases stream length and sinuosity, which slows flows, decreases the likelihood of bank erosion, and increases resiliency during higher flow storm events (especially with increasing impacts of climate change).
- Stabilize targeted bank and channel locations with bioengineering (vegetated) and hard armoring (stone) methods, which will decrease erosion. These methods include grading and placing either coir blankets with live stakes or rock toe to improve stream bank stability and decrease erosion. Both Alternatives 2 and 3 propose similar amounts of hard armoring. However, Alternative 3 includes more bioengineered than hard armored methods, compared to Alternative 2, due to the re-meander of the stream channel. There are also some additional grading and stabilization methods due to the re-meandering of the stream channel mentioned above.

7.0 Project Cost Considerations

This section presents a screening-level cost estimate of the evaluated alternatives, discusses potential funding sources, and provides an approximate project schedule.

7.1 Cost Estimates

The cost estimate is a Class 4 feasibility-level cost estimate as defined by the American Association of Cost Engineers International (AACE International) and uses the assumptions listed below and detailed in the following sections.

- The cost estimate assumes a 20% construction contingency.
- Costs associated with design, permitting, and construction observation (collectively “engineering”) are assumed to be 30% of the estimated construction costs (excluding contingency).
- For Alternatives 1 and 2, we assume temporary construction easements may be necessary to construct the project; however, the cost is expected to be negligible since these are temporary and not permanent easements. For Alternative 3, we assume permanent and temporary construction easements may be needed for the project. The Alternative 3 cost estimate includes the estimated cost for the permanent easements.
- Additional work may be required to determine if cultural and/or historical resources are present at the project site.

The Class 4 level cost estimates have an acceptable range of between -15% to -30% on the low range and +20% to +50% on the high range. Based on the development of concepts and initial vetting of the concepts by the City of Plymouth, BCWMC, and MnDNR, it is not necessary to utilize the full range of the acceptable range for the cost estimate. We assume the final costs of construction may be between -15% and +30% of the estimated construction budget.

Table 7-1 summarizes the feasibility-level total construction cost estimates, the 30-year annualized total construction cost estimates, and the annualized costs per pound of TSS and TP removed for the Ponderosa Woods Stream Restoration Project. Appendix E provides the detailed cost-estimate tables for all alternatives.

Table 7-1 Ponderosa Woods Stream Restoration Project Alternatives Cost Summary

Alternative Description	Project Cost Estimate ⁽¹⁾	Annualized Cost ⁽²⁾	TP Loading		TSS Loading	
			Load Reduction (lb/yr)	Cost/lb/yr Reduced ⁽³⁾	Load Reduction (lb/yr)	Cost/lb/yr Reduced ⁽³⁾
Alternative 1. (Small Footprint Design)	\$252,000 (\$202,000–\$328,000)	\$17,000	7.4	\$2,303	14,770	\$1.15
Alternative 2. (Medium Footprint Design)	\$429,000 (\$344,000–\$558,000)	\$27,000	7.4	\$3,658	14,770	\$1.83
Alternative 3. (Large Footprint Design)	\$506,000 (\$405,000–\$658,000)	\$34,000	10.8	\$3,151	21,580	\$1.58

- 1) A Class 4 screening-level opinion of probable cost, as defined by the American Association of Cost Engineers International (AACE International), was prepared for these alternatives. The opinion of probable construction cost provided in this table is based on the Commission Engineer’s experience and qualifications and represents our best judgment as experienced and qualified professionals familiar with the project. The cost opinion is based on project-related information available to the Commission Engineer at this time and includes a conceptual-level design of the project. It includes 20% project contingency and 30% for planning, engineering, design, and construction administration. The lower bound is assumed at -20% and the upper bound is assumed at +30%.
- 2) Assumed to be 15% of the total project cost for annual maintenance, plus replacement cost associated with major repairs and the initial project cost distributed evenly over a 30-year project lifespan.
- 3) Annualized cost divided by estimated annual pollution load reduction.

7.1.1 Temporary and Permanent Easements

Section 6.2.1 includes detailed discussion on recommended easements. The costs associated with temporary construction easements, if required, are typically negligible; no costs for temporary construction easements are included in this estimate. City may also consider additional easements to manage planted or invasive vegetation.

7.1.2 Off-Site Sediment Disposal

Based on the results of the desktop review of the MPCA’s “What’s In My Neighborhood?” database, we assumed that a Phase I assessment of bank material will not be necessary and that sediment disposed off-site will not require additional testing or special disposal as hazardous or dredged material. As such, these costs are not included in this estimate.

7.1.3 Wetland Mitigation

Stream banks are considered to be wetlands and disturbing the banks as part of a restoration project is a temporary wetland impact. Additionally, there is a small wetland area identified at the downstream area of the project site. However, because the purpose of restoration is to create a channel and permanent

wetland that can support a riparian ecosystem, the impacts are considered to be self-mitigating. Therefore, stream bank restoration projects do not typically require wetland mitigation and the associated additional costs.

7.1.4 Tree Replacement and Revegetation

We assume that the City of Plymouth will determine where tree replacements will be desired (based on estimated tree removals, long-term plans for this area, and discussions with private property owners) during final design. However, because this is a heavily forested area with a poor understory, the designs included in this report focus on tree removal rather than tree replacement. Through discussions with City staff, they indicated that tree removals associated with the project may open the canopy in such a way that it provides benefits for reestablishing vegetation, and it may not be desirable to replace trees along the project extents. Therefore, minimal tree replacements are anticipated.

Revegetation of the site will also include the removal of invasive buckthorn and planting of native species.

7.1.5 30-Year Cost

The 30-year cost for each alternative is based on anticipated maintenance and replacement costs. For alternatives with an estimated life span less than 30 years, significant maintenance is assumed to occur at the end of the estimated life span (i.e., 20 years for bioengineering, 30 years for hard armoring or storm sewer infrastructure); since all alternatives include a mix of hard armoring and bioengineering, but primarily bioengineering, the 30-year costs analysis will be based on the bioengineering lifespan to be conservative with costs. For bioengineering alternatives, the maintenance is assumed to equal 25% of the original construction cost. Annual maintenance estimates are based on maintenance costs associated with the initial “establishment” period; 15% is assumed for bioengineering alternatives and 2% for other alternatives incorporating hard armoring or storm sewer infrastructure.

The 30-year cost for each alternative is calculated as the future worth of the initial capital cost (including contingency and engineering costs) plus the future worth of annual maintenance and significant maintenance at the end of the alternative life span. A 3% rate of inflation is assumed. The annualized cost for each alternative is calculated as the value of 30 equal, annual payments of the same future worth as the 30-year cost.

7.1.6 Annualized Pollutant Reduction Cost

Estimated annual loading reductions for TSS and TP are included for each alternative in Table 7-1. The loading reductions assume that each alternative is successful in reducing bank erosion at each site. The annualized pollutant-reduction cost for each alternative is the annual load reduction divided by the annualized 30-year cost.

For the recommended stabilization alternatives presented in Table 7-1, the estimated total annualized pollutant reduction costs range from \$2,303 to \$3,658 per pound for TP and \$1.15 to \$1.83 per pound for TSS.

7.1.7 Miscellaneous Costs

Most site costs include miscellaneous items needed during construction (e.g., a rock construction entrance, a filter dike to control in-stream sediment disturbance, and restoration of access paths). Based on previous project experience, the estimate for each alternative includes some costs that could be applied to these miscellaneous items.

7.2 Funding Sources

The BCWMC will utilize the BCWMC CIP funds to implement these projects. The source of these funds is an ad valorem tax levied by Hennepin County over the entire Bassett Creek watershed on behalf of the BCWMC.

7.3 Project Schedule

The BCWMC is expected to hold a public hearing in September 2023 on this project. Pending the outcome of the hearing, the BCWMC will consider officially ordering the project, entering into an agreement with the City of Plymouth to design and construct the project, and certifying to Hennepin County a final 2024 tax levy for this project.

The construction work would likely begin in winter 2024/2025, as tree removal should occur in the period from October 15 to early April, outside of the northern long-eared bat's active season (mid-April – October 14). Additionally, excavation during the winter would be appropriate to complete the major earthwork during periods with less frequent runoff events. Final construction and restoration would be completed in spring/summer 2025.

For project construction to occur in winter 2024/2025, project design should begin in winter 2023/2024 or spring of 2024. The permit process may take 6 to 12 months, so begin permit process 6 to 12 months prior to start of construction. If project construction is scheduled for winter 2024/2025, summer 2024 bidding is recommended. This will give contractors adequate scheduling time to complete the project at a reasonable price. In the intervening time, the City would gather public input, prepare the final design, and obtain permits.

8.0 Alternatives Assessment and Recommendations

The final project will consist of a combination of the practices discussed in Section 5.0. The costs of the alternatives evaluated for the concept design are summarized in Section 7.0. The recommended alternatives were chosen based on if it met the goals and objectives outlined in Section 2.2. Since more than one alternative met these goals and objectives, priority was given to the alternatives that were cost-effective, stabilized stream banks, and used natural materials. The ability of the alternatives to improve stream habitat and vegetative surroundings (identified as priorities in stakeholder meetings) was also taken into consideration in choosing the recommended stream stabilization alternatives.

Stabilization and restoration of stream banks within the Ponderosa Woods Stream Restoration project area will provide water quality improvement by 1) repairing actively eroding sites and 2) preventing erosion at other sites by installing preemptive measures to protect existing stream banks. The Commission Engineer recommends implementation of Alternative 1 or Alternative 1 plus additional buckthorn removal (similar extents of buckthorn removal as in Alternatives 2 and 3), which will be referenced as Alternative 1.5. The Commission Engineer recommends Alternative 1 or 1.5 for this stabilization because it will achieve the water quality goals listed above and result in the stabilization of targeted sections of the stream reach, provide significant habitat enhancement and restore floodplain connectivity. Alternatives 1 and 1.5 are cost-effective options that improve stabilization of priority areas of the stream reach (minimizing erosion potential) while minimizing healthy tree removal. These recommended alternatives focus on bioengineering practices for stabilizing most of the eroded bank, installing rock cross vanes to minimize future erosion of the channel bed, managing sediment for one of the stormwater side-channels, and restoring aquatic and riparian habitat (including removing invasive buckthorn and green ash, and removing additional trees). Lastly, this alternative proposes design practices that will reduce the erosion threat for the nearby homes that are close to the stream.

The final design process should include continuing to work closely with the City of Plymouth and residents to develop a plan to successfully establish and maintain riparian vegetation on and near the banks within the project area.

The estimated design and construction costs for the recommended Alternatives 1 and 1.5 are \$252,000 and \$297,000, respectively, as shown in Table 8-1 below. The total estimated project capital cost for each of the recommended alternatives includes the following:

- Alternative 1: an estimated \$150,000 in construction costs, \$30,000 in construction contingency, and \$72,000 for design, permitting, and construction observation.
- Alternative 1.5: an estimated \$177,000 in construction costs, \$35,000 in construction contingency, and \$85,000 for design, permitting, and construction observation.

All costs are rounded to the nearest \$1,000. We recommend that the BCWMC use these costs to develop a levy request for the selected alternative for this project and that it proceed to design and construction.

Table 8-1 Recommended Stream Restoration Alternatives Cost Summaries

Alternative Description	Project Cost Estimate ⁽¹⁾	Annualized Cost ⁽²⁾	TP Loading		TSS Loading	
			Load Reduction (lb/yr)	Cost/lb/yr Reduced ⁽³⁾	Load Reduction (lb/yr)	Cost/lb/yr Reduced ⁽³⁾
Alternative 1 (Small Footprint Design)	\$252,000 (\$202,000 - \$328,000)	\$17,000	7.4	\$2,300	14,770	\$1.15
Alternative 1.5 (Small Footprint Design with additional buckthorn removal)	\$297,000 (\$238,000 - \$387,000)	\$20,000	7.4	\$2,700	14,770	\$1.35

- 1) A Class 4 screening-level opinion of probable cost, as defined by the American Association of Cost Engineers International (AACE International), has been prepared for these alternatives. The opinion of probable construction cost provided in this table is based on the Commission Engineer’s experience and qualifications and represents our best judgment as experienced and qualified professionals familiar with the project. The cost opinion is based on project-related information available to the Commission Engineer at this time and includes a conceptual-level design of the project. It includes 20% project contingency and 30% for planning, engineering, design, and construction administration. The lower bound is assumed at -20% and the upper bound is assumed at +30%.
- 2) Assumed to be 15% of the total project cost for annual maintenance, plus replacement cost associated with major repairs and the initial project cost distributed evenly over a 30-year project lifespan.
- 3) Annualized cost divided by estimated annual pollution load reduction.

The estimated costs to remove the large area of buckthorn range from about 11% to 22% of the total project cost (including the additional percentages of construction contingency, design, permitting, and construction observation), as shown in Table 8-2 below.

Table 8-2 Buckthorn Removal Area and Relative Costs

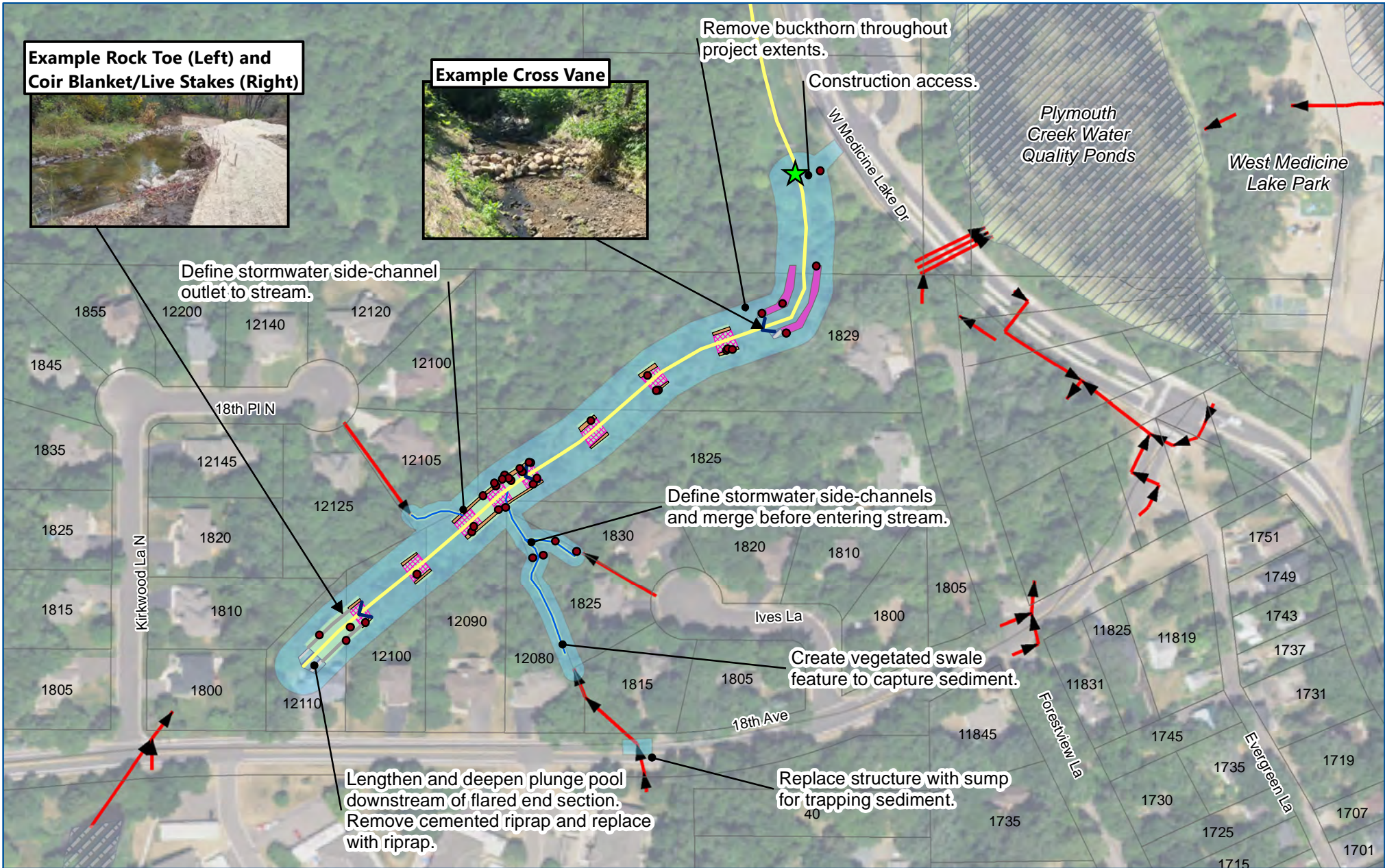
Alternative	Area of Buckthorn Removal (acres)	Cost of Buckthorn Removal Compared to Total Project Cost
1	1.5 acres	11%
1.5	3.5 acres	22%
2	3.5 acres	15%
3	3.3 acres	12%

These significant buckthorn removal costs expand the project scope to incorporate a larger riparian habitat restoration area. The BCWMC could decide to reduce the buckthorn removal area to 1.5 acres to focus on the areas directly adjacent to the stream and stormwater side-channels. This would decrease the total project cost(including construction contingency, construction observation, design, permitting, and planning) by \$44,000 for Alternatives 1.5 and 2, and by \$39,000 for Alternative 3.

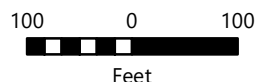
Example Rock Toe (Left) and Coir Blanket/Live Stakes (Right)



Example Cross Vane



- Ponds and Wetlands
- Storm Sewer
- Main Channel
- Project Extents
- Side Channels
- Bank and Channel Grading
- Cross Vanes
- Rock Toe
- Riprap
- Protect and Reinforce Existing Riprap
- Coir Blanket with Live Stakes and Planting
- Debris Removal
- Construction Access
- Remove Tree



Project extents: 2.3 acres

Imagery: USDA, 2021

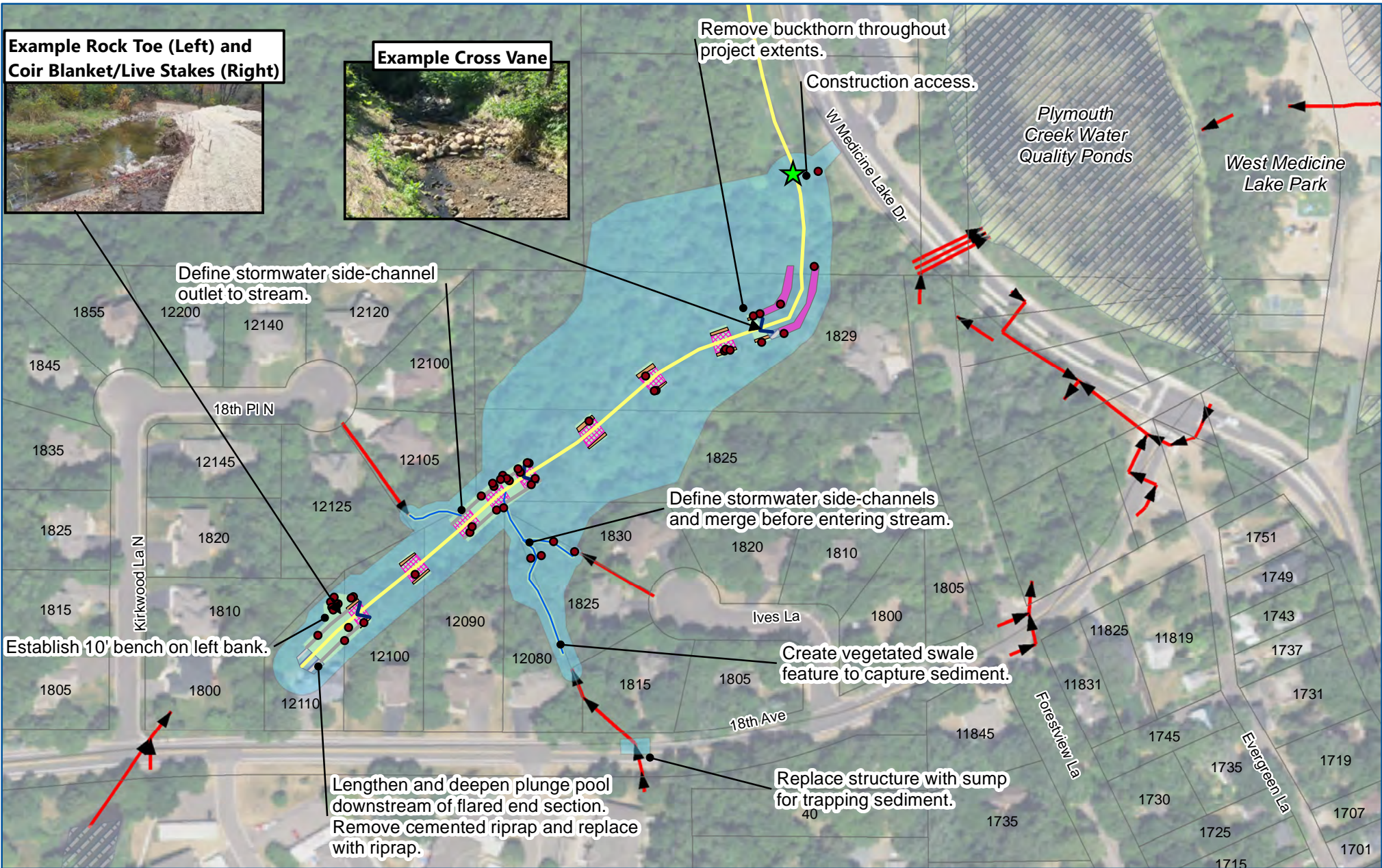
DESIGN ALTERNATIVE 1
Ponderosa Woods Stream
Restoration Feasibility Study
 BCWMC

FIGURE 5-1

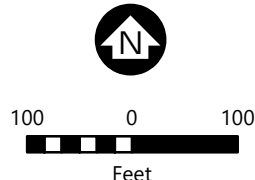
Example Rock Toe (Left) and Coir Blanket/Live Stakes (Right)



Example Cross Vane



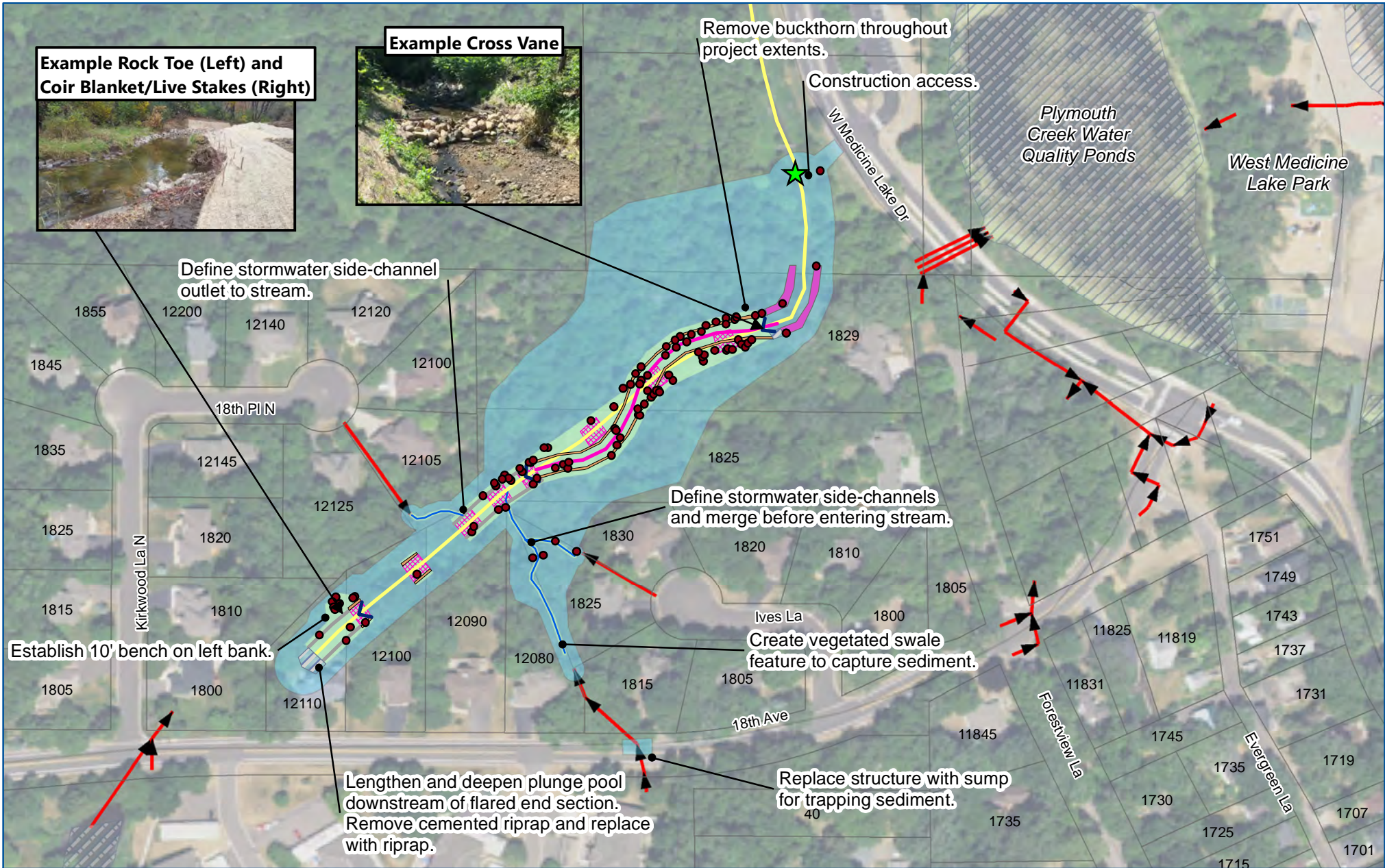
- | | |
|--------------------------|--|
| Ponds and Wetlands | Riprap |
| Storm Sewer | Protect and Reinforce Existing Riprap |
| Main Channel | Coir Blanket with Live Stakes and Planting |
| Project Extents | Debris Removal |
| Side Channels | Construction Access |
| Bank and Channel Grading | Remove Tree |
| Cross Vanes | |
| Rock Toe | |



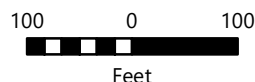
Project extents: 4.4 acres

Imagery: USDA, 2021

DESIGN ALTERNATIVE 2
 Ponderosa Woods Stream
 Restoration Feasibility Study
 BCWMC
FIGURE 5-2



- Ponds and Wetlands
- Storm Sewer
- Main Channel
- Remeandered Channel
- Project Extents
- Side Channels
- Bank and Channel Grading
- Cross Vanes
- Rock Toe
- Riprap
- Protect and Reinforce Existing Riprap
- Coir Blanket with Live Stakes and Planting
- Debris Removal
- Construction Access
- Remove Tree



Project extents: 4.5 acres

Imagery: USDA, 2021

DESIGN ALTERNATIVE 3
 Ponderosa Woods Stream
 Restoration Feasibility Study
 BCWMC
FIGURE 5-3



Memorandum

To: Bassett Creek Watershed Management Commission
From: Barr Engineering Co. (Patrick Brockamp, PE, Jim Herbert, PE, and Karen Chandler, PE)
Subject: Item 6B: Update Regarding Main Stem Lagoon Dredging Project
BCWMC May18, 2023 Meeting Agenda
Date: May 11, 2023

1.0 Project Update

The Main Stem Lagoon Dredging Project included dredging a plan quantity of 39,600 CY (cubic yards) of contaminated sediment from three lagoons (D, E, F) within the creek in Theodore Wirth Park (feasibility study Alternative 2, Option 1: deepening all three lagoons to a depth of 6 feet). On Nov 10, 2022, the Commission entered into a contract with Fitzgerald Excavating and Trucking (Contractor) for this work. The contract specifications included the expected amount of material to be dredged (39,600 CY) and the design depth of 6 feet for each lagoon. The Contractor started dredging work on January 13, 2023, and the Contractor's last day of hauling occurred on March 3, 2023, after which they demobilized from the site. Photos of the before and after dredging for each lagoon are provided in Attachment A.

On April 10, 2023, the Contractor submitted progress Application for Payment No. 3 for work completed through March 31, 2023. During a review of Application for Payment No. 3, Commission engineers (Barr) determined that a post-construction bathymetric survey was necessary to confirm dredging quantities. Between April 17 and May 5, 2023, Barr performed bathymetric record surveys with a Z-boat (remotely-operated hydrographic survey boat) of the three lagoons. Barr also performed a traditional verification survey of cross-sections with grade rod measurements to confirm the Z-boat results. Barr was in communication with the Contractor during the verification survey and provided an opportunity for them to participate. The attached figures (Attachment B) show the constructed dredging depth relative to the design depth. As shown on the figures, the Contractor did not dredge deep enough across all three lagoons, except for the lagoon side slopes.

Results of the record bathymetric (Z-boat) survey are included in the following table. As shown, the record survey quantity is closer to feasibility study Alternative 1, that included a 4-foot dredge depth, instead of the selected feasibility study Alternative 2, that included a 6-foot dredge depth.

Lagoon	Design Specifications Quantity Feasibility Alt. 2 (6-ft. Depth) (CY)	Record Survey Quantity (Actual Outcome) (CY)	Feasibility Alt. 1 (4-ft. Depth) (CY)
F	12,200	8,000	9,100
E	19,300	11,650	12,600
D	8,100	6,000	6,100
ALL	39,600	25,650	27,800

To: Bassett Creek Watershed Management Commission
From: Barr Engineering Co. (Patrick Brockamp, PE, Jim Herbert, PE, and Karen Chandler, PE)
Subject: Item 6B: Update Regarding Main Stem Lagoon Dredging Project
BCWMC May18, 2023 Meeting Agenda
Date: May 11, 2023
Page: 2

At its February 2023 meeting, the Commission approved Application for Payment No. 1(\$363,375.00), which included a total dredging quantity to date of 8,000 CY, and at its March 2023 meeting, the Commission approved Application for Payment No. 2 (an additional \$886,217.00), which included a total dredging quantity to date of 33,660 CY. The reported dredging quantity was based on visual estimates of percent of lagoon dredging completed, material tonnage reports provided by the disposal landfill, and the Contractor's estimated conversion factor from tons to cubic yards. However, based on the subsequent record survey performed by Barr, the dredging quantities were overpaid by approximately 8,000 CY. The following table is a summary of the payments.

Description	Payment Amount
Application for Payment No. 1	\$ 363,375.00
Application for Payment No. 2	\$ 886,217.00
Total Paid to Date	\$ 1,249,592.00
Estimated Final Payment*	\$ 1,121,645.00
Estimated Overpayment	\$ 127,947.00

*Estimated final payment assumes all remaining work is included in the final contract price, and dredging quantity is reduced to the amount per record survey

The Contractor informed us that they plan to complete restoration at the site prior to the date of the May Commission meeting. We anticipate the Contractor will submit another pay request following completion of the restoration work.

Considering the above information, the Commission attorney is in the process of reviewing the contract documents to evaluate options and next steps for the Commission. Commission staff (Engineer, Administrator, Attorney) will continue working together to evaluate how to proceed, including what formal steps need to be taken under the contract documents to address the situation and preserve any rights the Commission may have as it relates to the issues identified above. Commission staff will provide updates to the Commission on an ongoing basis.

Attachment A - Before and After Photos

Main Stem – Lagoon D



Photo 1: Lagoon D before construction, November 22, 2019



Photo 2: Lagoon D after construction, April 4, 2023

Main Stem – Lagoon E



Photo 3: Lagoon E before construction, November 11, 2019



Photo 4: Lagoon E after construction, April 4, 2023

Main Stem – Lagoon F



Photo 5: Lagoon F before construction, November 22, 2019



Photo 6: Lagoon F after construction, April 4, 2023

Attachment B – Dredging Survey Verification Figures

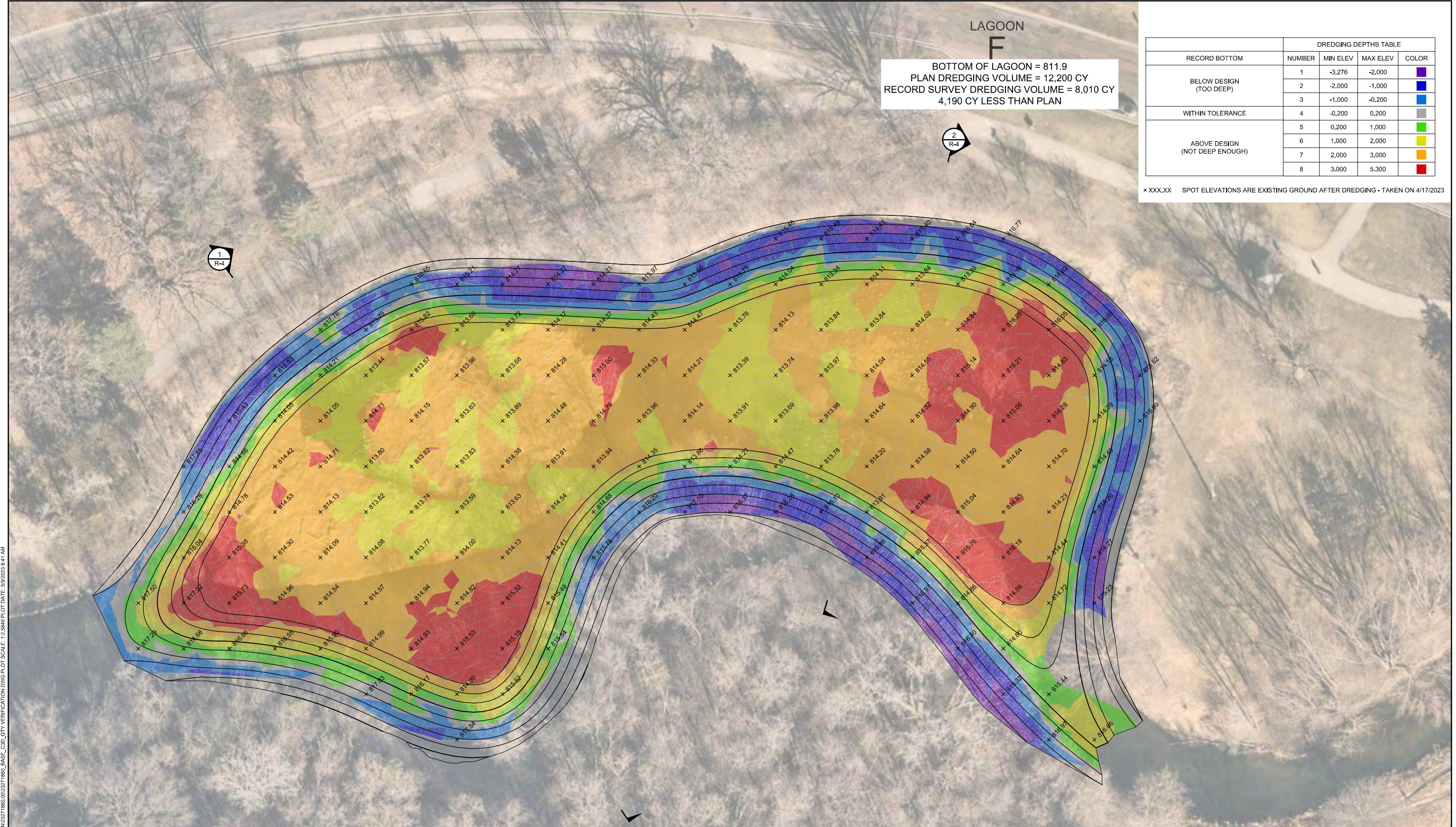
LAGOON

F

BOTTOM OF LAGOON = 811.9
 PLAN DREDGING VOLUME = 12,200 CY
 RECORD SURVEY DREDGING VOLUME = 8,010 CY
 4,190 CY LESS THAN PLAN

RECORD BOTTOM	DREDGING DEPTHS TABLE			
	NUMBER	MIN ELEV	MAX ELEV	COLOR
BELOW DESIGN (TOO DEEP)	1	-3.276	-2.000	Blue
	2	-2.000	-1.000	Green
	3	-1.000	-0.200	Yellow
WITHIN TOLERANCE	4	-0.200	0.200	Orange
	5	0.200	1.000	Red
ABOVE DESIGN (NOT DEEP ENOUGH)	6	1.000	2.000	Light Blue
	7	2.000	3.000	Light Green
	8	3.000	5.300	Light Yellow

* XXX.XX SPOT ELEVATIONS ARE EXISTING GROUND AFTER DREDGING - TAKEN ON 4/17/2023



1 PLAN: SITE PLAN - LAGOON F 0 20 40 SCALE IN FEET

NO.	BY	CHK.	APP.	DATE	REVISION DESCRIPTION

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
 PRINTED NAME: _____
 SIGNATURE: _____
 DATE: _____ LICENSE # _____

REVIEW	BID	CONSTRUCTION	RECORD

RELEASED TO/FOR: 0 1 2 3 4 5 6 DATE RELEASED

BARR Project Office:
 BARR ENGINEERING CO.
 4300 MARKETPOINTE DRIVE
 Suite 200
 MINNEAPOLIS, MN 55435
 Corporate Headquarters:
 Minneapolis, Minnesota
 Ph: 1-800-632-2277
 Fax: (952) 832-2601
 www.barr.com

Scale	AS SHOWN
Date	05/09/2023
Drawn	PEB
Checked	PEB
Designed	BARR
Approved	PEB

**BASSETT CREEK WATERSHED
 MANAGEMENT COMMISSION**
 GOLDEN VALLEY, MINNESOTA

MAIN STEM LAGOON DREDGING PROJECT
 GOLDEN VALLEY, MINNESOTA
 LAGOON F

RECORD SURVEY VOLUME COMPARISON	
BARR PROJECT No.	23/27-1860.00
CLIENT PROJECT No.	BC-7 2021
DWG. No.	R-1
REV. No.	A

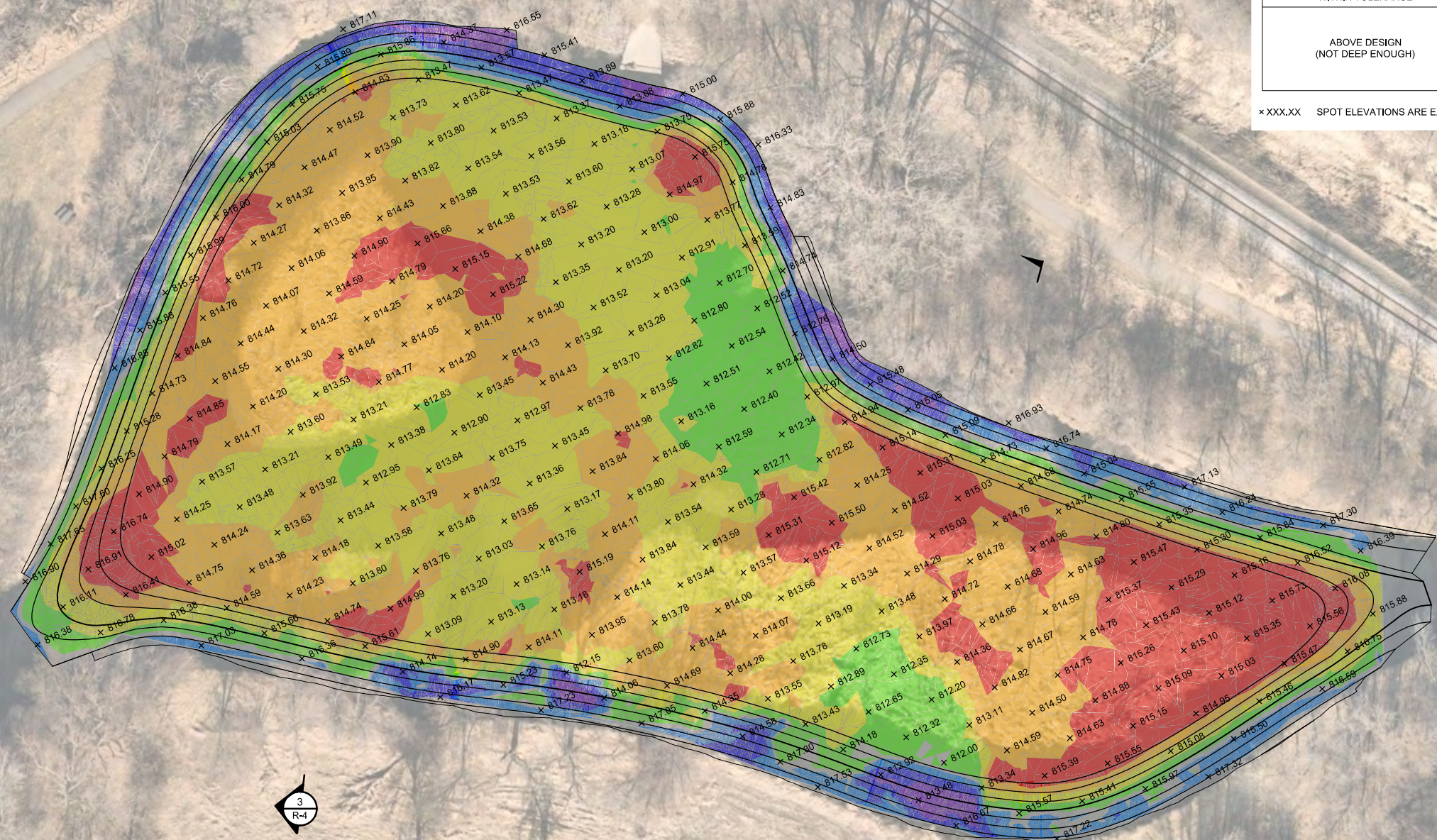
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LAGOON
E

BOTTOM OF LAGOON = 811.8
 PLAN DREDGING VOLUME = 19,300 CY
 RECORD SURVEY DREDGING VOLUME = 11,650 CY
 7,650 LESS THAN PLAN

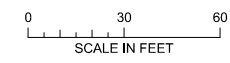
RECORD BOTTOM	DREDGING DEPTHS TABLE			
	NUMBER	MIN ELEV	MAX ELEV	COLOR
BELOW DESIGN (TOO DEEP)	1	-3.848	-2.000	Blue
	2	-2.000	-1.000	Dark Blue
	3	-1.000	-0.200	Light Blue
WITHIN TOLERANCE	4	-0.200	0.200	Grey
	5	0.200	1.000	Light Green
ABOVE DESIGN (NOT DEEP ENOUGH)	6	1.000	2.000	Yellow
	7	2.000	3.000	Orange
	8	3.000	5.000	Red

x XXX.XX SPOT ELEVATIONS ARE EXISTING GROUND AFTER DREDGING - TAKEN ON 4/17/2023



CADD USER: Patrick E. Brockamp; FILE: M:\DESIGN\23271860_00\23271860_BASE_CADD_QTY_VERIFICATION.DWG; PLOT DATE: 9/8/2023 8:41 AM

1 PLAN: SITE PLAN - LAGOON E



NO.	BY	CHK.	APP.	DATE	REVISION DESCRIPTION

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

PRINTED NAME: _____
 SIGNATURE: _____
 DATE: _____ LICENSE #: _____

REVIEW	BID	CONSTRUCTION	RECORD

RELEASED TO/FOR	0	1	2	3	4	5	6

BARR Engineering Co.
 4300 MARKETPOINTE DRIVE
 Suite 200
 MINNEAPOLIS, MN 55435

Project Office:
 BARR ENGINEERING CO.
 4300 MARKETPOINTE DRIVE
 Suite 200
 MINNEAPOLIS, MN 55435

Corporate Headquarters:
 Minneapolis, Minnesota
 Ph: 1-800-632-2277
 Fax: (952) 832-2601
 www.barr.com

Scale	AS SHOWN
Date	05/09/2023
Drawn	PEB
Checked	PEB
Designed	BARR
Approved	PEB

**BASSETT CREEK WATERSHED
 MANAGEMENT COMMISSION**
 GOLDEN VALLEY, MINNESOTA

MAIN STEM LAGOON DREDGING PROJECT
 GOLDEN VALLEY, MINNESOTA

LAGOON E

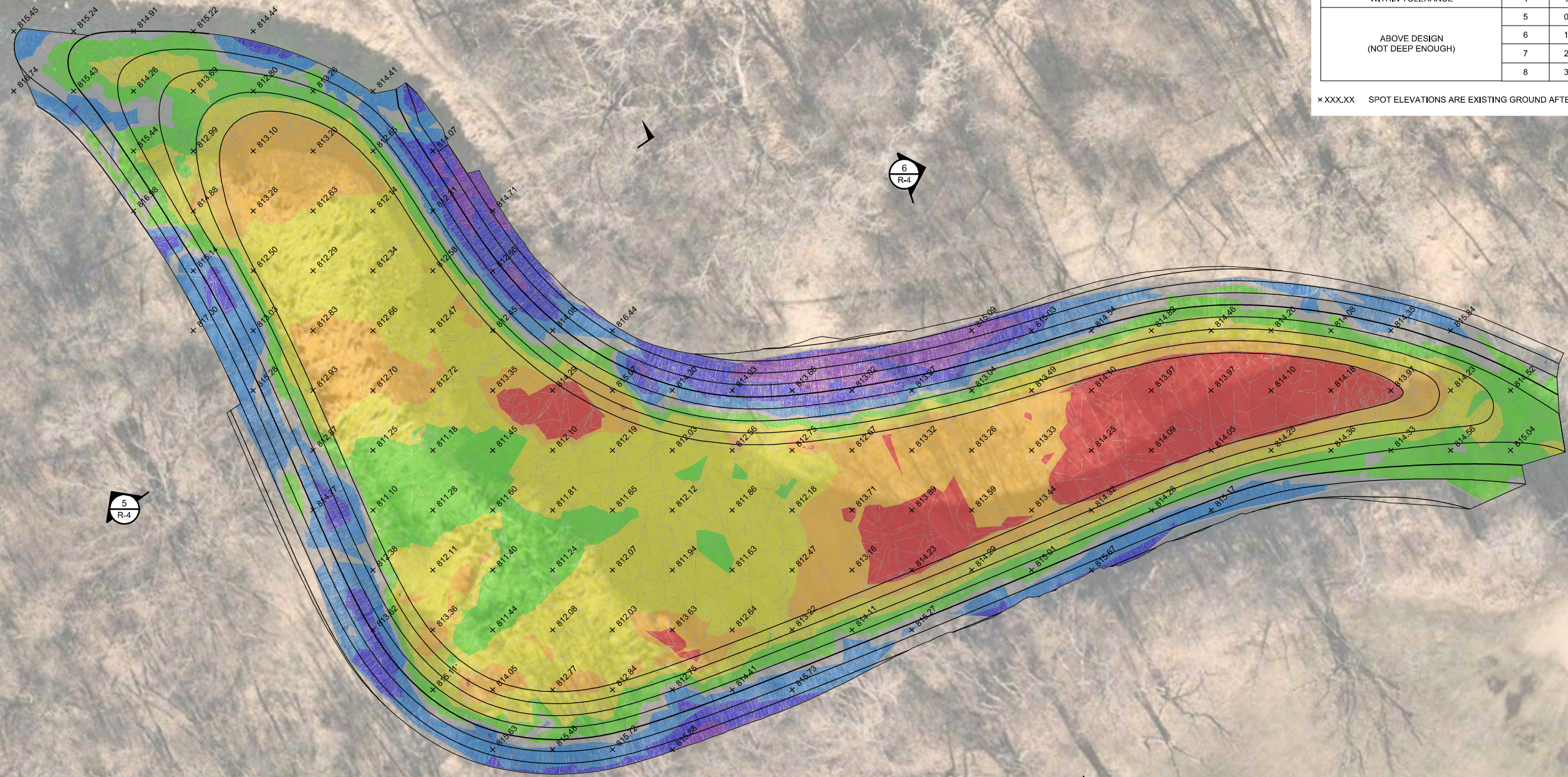
BARR PROJECT No. 23/27-1860.00	
CLIENT PROJECT No. BC-7 2021	
DWG. No. R-2	REV. No. A

LAGOON D

BOTTOM OF LAGOON = 810.6
PLAN DREDGING VOLUME = 8,100 CY
RECORD SURVEY DREDGING VOLUME = 5,978 CY
2,122 CY LESS THAN PLAN

RECORD BOTTOM	DREDGING DEPTHS TABLE			
	NUMBER	MIN ELEV	MAX ELEV	COLOR
BELOW DESIGN (TOO DEEP)	1	-3.154	-2.000	Blue
	2	-2.000	-1.000	Dark Blue
	3	-1.000	-0.200	Light Blue
WITHIN TOLERANCE	4	-0.200	0.200	Grey
ABOVE DESIGN (NOT DEEP ENOUGH)	5	0.200	1.000	Light Green
	6	1.000	2.000	Yellow
	7	2.000	3.000	Orange
	8	3.000	5.100	Red

x XXX.XX SPOT ELEVATIONS ARE EXISTING GROUND AFTER DREDGING - TAKEN ON 4/19/2023



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1 PLAN: SITE PLAN - LAGOON D

0 20 40
SCALE IN FEET



NO.	BY	CHK.	APP.	DATE	REVISION DESCRIPTION

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

PRINTED NAME _____
 SIGNATURE _____
 DATE _____ LICENSE # _____

REVIEW	BID	CONSTRUCTION	RECORD	RELEASED TO/FOR	DATE RELEASED

BARR Engineering Co.
 4300 MARKETPOINTE DRIVE
 SUITE 200
 MINNEAPOLIS, MN 55435

Project Office:
 BARR ENGINEERING CO.
 4300 MARKETPOINTE DRIVE
 SUITE 200
 MINNEAPOLIS, MN 55435

Corporate Headquarters:
 Minneapolis, Minnesota
 Ph: 1-800-632-2277
 Ph: 1-800-632-2277

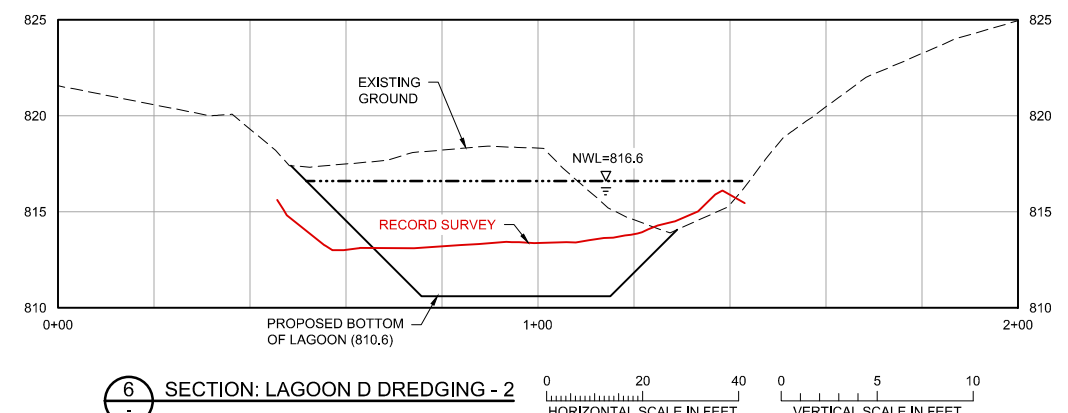
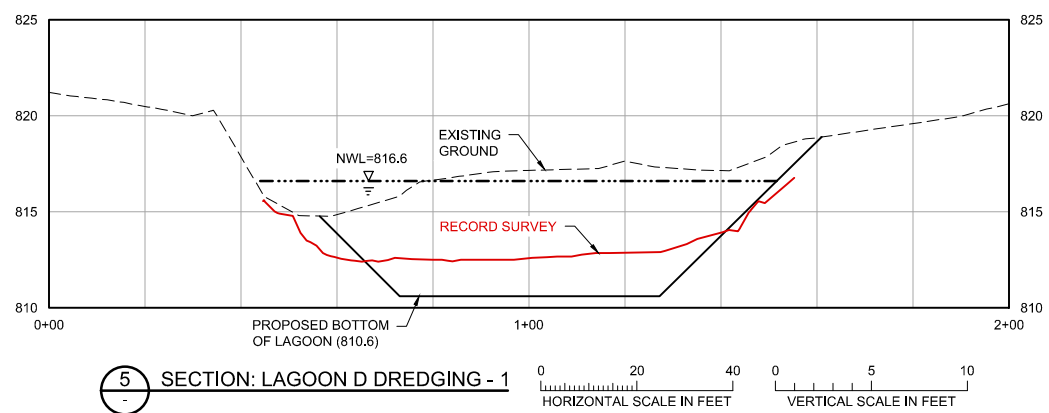
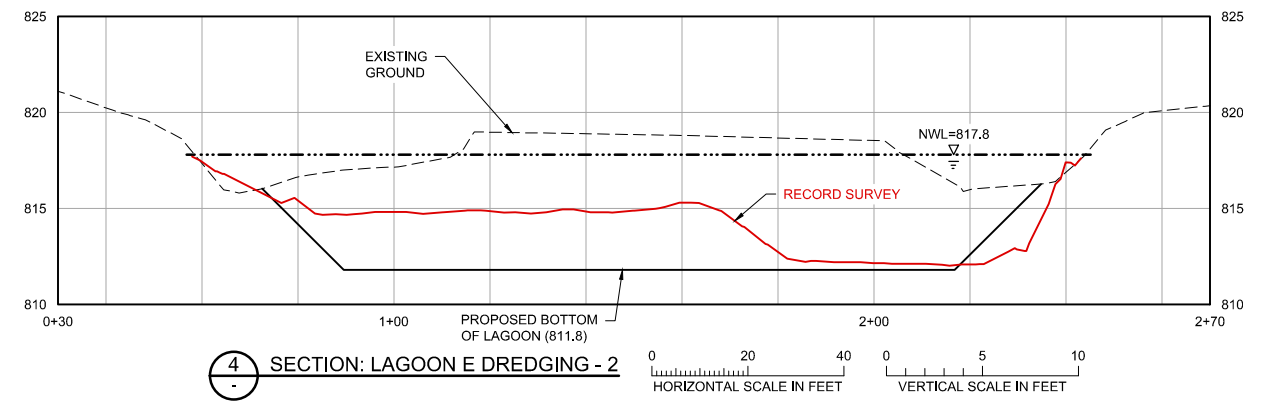
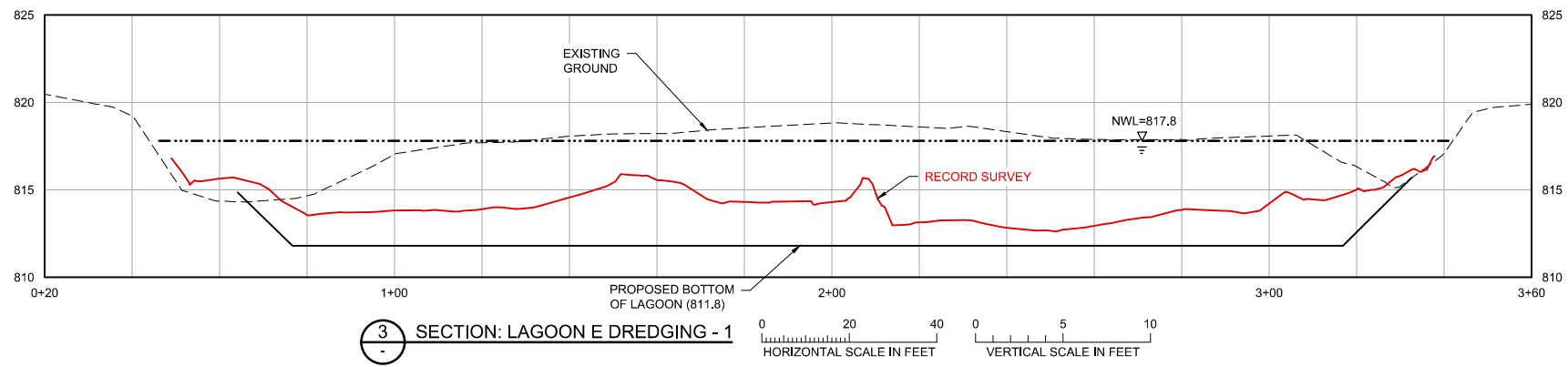
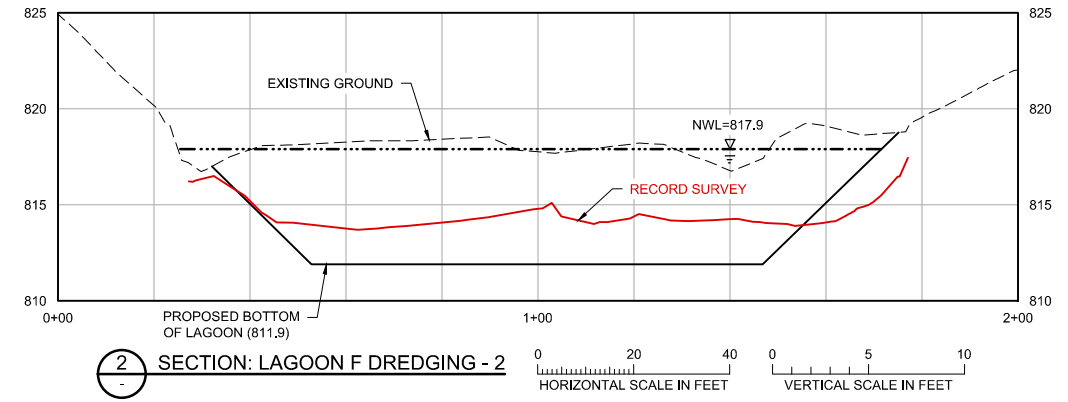
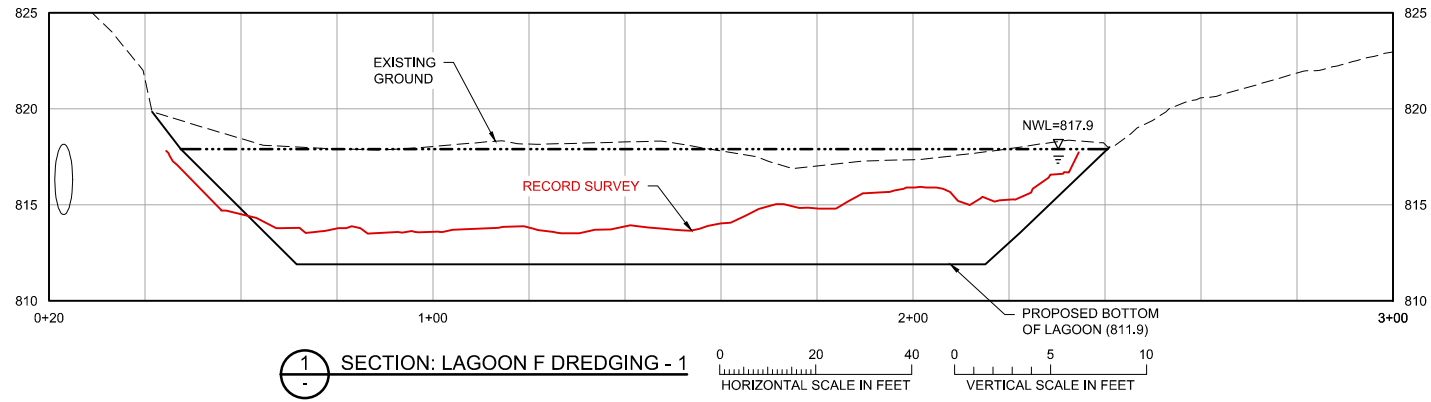
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Date	05/09/2023
Drawn	PEB
Checked	PEB
Designed	BARR
Approved	PEB

**BASSETT CREEK WATERSHED
 MANAGEMENT COMMISSION**
 GOLDEN VALLEY, MINNESOTA

MAIN STEM LAGOON DREDGING PROJECT
 GOLDEN VALLEY, MINNESOTA
 LAGOON D

**RECORD SURVEY
 VOLUME COMPARISON**

BARR PROJECT No. 23/27-1860.00	
CLIENT PROJECT No. BC-7 2021	
DWG. No. R-3	REV. No. A



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**RECORD SURVEY
VOLUME COMPARISON**

NO.	BY	CHK.	APP.	DATE	REVISION DESCRIPTION

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

PRINTED NAME: _____
SIGNATURE: _____
DATE: _____ LICENSE #: _____

REVIEW	BID	CONSTRUCTION	RECORD	RELEASED TO/FOR	DATE RELEASED

BARR ENGINEERING CO.
4300 MARKETPOINTE DRIVE
SUITE 200
MINNEAPOLIS, MN 55435

Project Office:
BARR ENGINEERING CO.
4300 MARKETPOINTE DRIVE
SUITE 200
MINNEAPOLIS, MN 55435

Corporate Headquarters:
Minneapolis, Minnesota
Ph: 1-800-632-2277
Ph: (952) 832-2601
Ph: 1-800-632-2277
www.barr.com

Scale	AS SHOWN
Date	05/09/2023
Drawn	PEB
Checked	PEB
Designed	BARR
Approved	PEB

**BASSETT CREEK WATERSHED
MANAGEMENT COMMISSION**
GOLDEN VALLEY, MINNESOTA

MAIN STEM LAGOON DREDGING PROJECT
GOLDEN VALLEY, MINNESOTA
CROSS SECTIONS

BARR PROJECT No. 23/27-1860.00	
CLIENT PROJECT No. BC-7 2021	
DWG. No. R-4	REV. No. A



Bassett Creek Watershed Management Commission

MEMO

To: BCWMC Commissioners and Alternate Commissioners
From: BCWMC Budget Committee Chair Sicora and Committee Members
Date: May 10, 2023

Recommendations:

1. Review and comment on committee notes on the 2024 operating budget and budget-related items
2. Update Commission's Policy Manual regarding use of investment income

The BCWMC Budget Committee met April 3rd and May 1st to discuss BCWMC finances and to begin developing the 2024 operating budget. The committee offers (1) the following notes regarding the 2024 operating budget and (2) a recommendation for updates to fiscal policies.

2024 OPERATING BUDGET

The committee is finalizing development of the proposed 2024 Operating Budget for all administration, planning, monitoring, engineering, and other activities that are outside work related to implementing capital improvements (CIP projects). [CIP projects are funded through a separate budgetary process involving taxes raised by Hennepin County on the Commission's behalf.]

The outcome of the 2022 financial audit (expected in late May) will inform final budget figures. The final 2024 proposed budget will be presented at the June meeting in time for distribution to cities for input by July 1st. Additional notes on budget development include:

- Working draft of the budget includes city assessments about 5.8% over this year's assessments which may change pending the 2022 audit outcomes
- Overall operating budget will be higher primarily due to monitoring expenses (2024 monitoring includes 3 lakes rather than typical 2 lakes as laid out in the approved [10-year routine monitoring plan](#))
- Budget will include some use of General Fund balance but fund balance will be maintained at approximately 50% of annual operating expenses (Fiscal Policy 3.2.1)
- Budget will utilize a portion of the funds previously set aside for 2025 Watershed Management Plan development, based on a watershed plan funding practice established for the 2023 budget.
- Budget is slated to allocate 50% (\$14,400) of the 10-year average investment income as General Fund revenue (see recommended policy below) which helps to lower city assessments. The remaining 50% would be allocated to the CIP budget.

In addition to the 2024 budget, the committee discussed:

- A potential opportunity to move financial-related tasks to the City of Plymouth's finance department (like how Golden Valley operated as the Commission's accounting staff for decades). BCWMC staff is meeting with Plymouth staff to discuss further.

- A possible recommendation to change the Commission’s fiscal year to the calendar year. Currently, the Commission’s fiscal year begins on February 1st which makes for complicated and confusing financial statements, budgets, and contracting.

INVESTMENT INCOME POLICY

Over the past nine years, income from BWCMC investments has averaged \$28,800 (with 2022 income being significantly higher than previous years at over \$110,000). Until 2022, income from investments was allocated between the General Fund (i.e., operating budget) and the Capital Improvement Program (CIP) Fund based on the percentage of total dollars in each fund. Because the CIP Fund has the vast majority of BWCMC funding (in order to implement large, expensive CIP projects), most of the income was allocated to that fund.

The Budget Committee reviewed information related to allocating investment income including:

- BCWMC Deputy Treasurer Sue Virnig recommends the Commission develop a policy stating where investment income will be allocated.
- BCWMC Financial auditors, MMKR, noted that allocating income based on the percentage of total dollars in each fund is the typical accounting practice. However, there are no laws or accounting requirements that would prohibit allocating income in a different manner.
- Allocating a higher percentage of investment income to the General Fund would help keep city assessments lower while maintaining a robust portion as income to the CIP Fund
- A policy of allocating the income equally (50-50) between the two funds is simple
- A policy that includes flexibility to change the allocation rates would allow the Commission to adjust the allocation percentage if budgetary circumstances arise

Recommendation: Section 2.9 of the BWCMC [Policy Manual](#) includes policies and implementation strategies related to investments and the depository of funds. The Budget Committee recommends updating the policy with a new strategy shown underlined below.

2.9 Investment and Depository of Funds

Policy: The Commission adopts the following guidelines regarding investment of Commission funds.

Description: It is the responsibility of the Commission to invest Commission funds in order to attain a market rate of return while preserving and protecting the capital of the overall portfolio and to ensure compliance with statutory requirements applicable to the Commission’s designation a depository financial institution. Investments will be made in compliance with statutory constraints and in safe, low-risk instruments.

Applicable funding: Operating budget and Capital Improvement Program budget

Adopted:

Citation: Minnesota Statute Chapter 118A

Strategies to implement policy:

1. **Scope.** This policy applies to all financial assets of the Commission including but not limited to:
 - General Fund
 - Construction Fund
2. **Designation of Depository and Collateralization.** The Commission annually will designate a financial institution or institutions in the State of Minnesota as the depository of Commission funds.

In the event the Commission does not designate a depository in any particular year, the last-designated depository will continue in that capacity. Each depository will furnish collateral, as necessary, in the manner and to the extent required by Minnesota Statutes section 118A.03, as it may be amended, and other applicable law. Collateral will be held in safekeeping in compliance with Section 118A.03, as it may be amended.

3. **Delegation of Authority.** Minnesota Statutes section 118A.02 provides that the governing body may authorize the treasurer or chief financial officer to make investments of funds under Sections 118A.01 to 118A.06 or other applicable law. The Commission authorizes the Treasurer or Deputy Treasurer to invest Commission funds pursuant to this policy and state law for the Bassett Creek Watershed Management Commission.

The Treasurer or Deputy Treasurer shall assure compliance with this policy and further develop and maintain adequate controls, procedures, and methods assuring security and accurate accounting on a day-to-day basis.

4. **Objectives.** At all times, the Commission's investments shall be made and maintained in accordance with Minnesota Statutes Chapter 118A as it may be amended. The primary objectives of the Commission investment activities shall be in the following order of priority:

- i. Security

Security of principal is the foremost objective of the investment portfolio. Preserving capital and protecting investment principal shall be the primary objective of each investment transaction.

- ii. Liquidity

The investment portfolio shall remain sufficiently liquid to meet projected disbursement requirements.

- iii. Return on Investment

The investment portfolio shall be designed to manage the funds to maximize returns consistent with items A and B above and within the requirements set forth in this policy.

5. **Prudence.** The "prudent person" standard shall be applied in managing Commission investments. All investment transactions shall be made in good faith with the degree of judgment and care, under the circumstances, that a person of prudence, discretion, and intelligence would exercise in the management of their own affairs, in accordance with this policy.
6. **Eligible Investments.** All investments will be considered eligible if they are made in accordance with Minnesota Statutes Section 118A.04.
7. **Investment Restrictions.** In addition to statutory prohibitions, investments specifically prohibited are derivative products, structured notes, inverse index bonds, repurchase agreements not authorized by statute, and other exotic products.
8. **Investment Income.** It is the intent of the Commission to divide the income from investments (dividends) equally between the General Fund and the Construction Fund (funds restricted for Capital Improvements). The Commission will have the flexibility to adjust allocations of income to each fund pending budgetary circumstances and upon review and input from the Deputy Treasurer and the BCWMC Budget Committee.
9. **Safekeeping.** Commission investments, contracts and agreements will be held in safekeeping in compliance with Minnesota Statutes Section 118A.06. In addition, before accepting any investment of Commission funds and annually thereafter, the supervising officer of the financial institution serving as a broker for the Commission shall submit a certification stating that the officer has reviewed the Commission Investment and Depository Policy and incorporated statement of investment restrictions, as well as applicable state law, and agrees to act in a manner consistent with the policy and law. The Commission will annually will provide the policy, as it may be amended.

The certification shall also require the supervising officer to disclose potential conflicts of interest or risk to public funds that might arise out of business transactions between the firm and the Commission. All financial institutions shall agree to undertake reasonable efforts to preclude imprudent transactions involving the Commission funds.

10. **Conflict of Interest.** Any Commissioner or staff member involved in the investment process shall refrain from personal business activity that could conflict with proper execution of the investment program or which could impair his/her ability to make impartial investment decisions.
11. **Internal Controls and Reporting.** Internal controls are designed to prevent loss of public funds due to fraud, error, misrepresentation, unanticipated market changes, or imprudent actions. Before the Commission invests any surplus funds, competitive quotations shall be obtained. If a specific maturity date is required, either for cash flow purposes or for conformance to maturity guidelines, quotations will be requested for instruments that meet the maturity requirement. The Commission will accept the quotation that provides the highest rate of return within the maturity required and within the limits of this policy.

The Commission Treasurer or Deputy Treasurer shall be limited to investing funds for up to a maximum term of seven years. The Commission administrator shall request approval from the Commission to authorize investment of funds for terms exceeding seven years.

Monthly, the Commission Treasurer or Deputy Treasurer shall provide an investments report to the Commission. Investments shall be audited and reported with financial statement annually. It shall be the practice of the Commission to review and amend the investment policy from time to time as needed.



Bassett Creek Watershed Management Commission MEMO

Date: May 10, 2023
From: Laura Jester, Administrator
To: BCWMC Commissioners
RE: **Administrator’s Report**

Aside from this month’s agenda items, the Commission Engineers, city staff, committee members, and I continue to work on the following Commission projects and issues.

CIP Projects (more resources at <http://www.bassettcreekwmo.org/projects.>)

2019 Medicine Lake Road and Winnetka Avenue Area Long Term Flood Mitigation Plan Implementation Phase I: DeCola Ponds B & C Improvement Project (BC-2, BC-3 & BC-8) Golden Valley (No change since Nov 2021): A feasibility study for this project was completed in May 2018 after months of study, development of concepts and input from residents at two public open houses. At the May 2018 meeting, the Commission approved Concept 3 and set a maximum 2019 levy. Also in May 2018, the Minnesota Legislature passed the bonding bill and the MDNR has since committed \$2.3M for the project. The Hennepin County Board approved a maximum 2019 levy request at their meeting in July 2018. A BCWMC public hearing on this project was held on August 16, 2018 with no comments being received. Also at that meeting the Commission officially ordered the project and entered an agreement with the City of Golden Valley to design and construct the project. In September 2018, the City of Golden Valley approved the agreement with the BCWMC. The [Sun Post](#) ran an article on this project October 2018. Another public open house and presentation of 50% designs was held February 6, 2019. An EAW report was completed and available for public review and comment December 17 – January 16, 2019. At their meeting in February 2019, the Commission approved the 50% design plans. Another public open house was held April 10th and a public hearing on the water level drawdown was held April 16th. 90% Design Plans were approved at the April Commission meeting. It was determined a Phase 1 investigation of the site is not required. The City awarded a contract to Dahn Construction for the first phase of the project, which involves earthwork, utilities, and trail paving and extends through June 2020. Dewatering began late summer 2019. Tree removal was completed in early winter; excavation was ongoing through the winter. As of early June 2020, earth work and infrastructure work by Dahn Construction is nearly complete and trail paving is complete. Vegetative restoration by AES is underway including soil prep and seeding. Plants, shrubs, and trees will begin soon along with placement to goose protection fencing to help ensure successful restoration. The construction phase of this project was completed in June with minor punch list items completed in September. The restoration and planting phase is complete except for minor punch list items and monitoring and establishment of vegetation over three growing seasons. A final grant report for BWSR’s Watershed Based Implementation Funding was submitted at the end of January. City staff recently completed a site walk through to document dead or dying trees and shrubs in need of replacement (under warranty). This project (along with Golden Valley’s Liberty Crossing Project) recently received the award for “Project of the Year” from the Minnesota Association of Floodplain Managers as part of the overall Project website: <http://www.bassettcreekwmo.org/index.php?CID=433> .

2020 Bryn Mawr Meadows Water Quality Improvement Project (BC-5), Minneapolis: A feasibility study by the Commission Engineer was developed in 2018 and approved in January 2019. The study included wetland delineations, soil borings, public open houses held in conjunction with MPRB’s Bryn Mawr Meadows Park improvement project, and input from MPRB’s staff and design consultants. Project construction year was revised from 2020 and 2022 to better coincide with the MPRB’s planning and implementation of significant improvements and redevelopment Bryn Mawr Meadows Park where the project will be located. A public hearing for this project was held September 19, 2019. The project was officially ordered at that meeting. In January 2020 this project was awarded a \$400,000 Clean Water Fund grant from BWSR; a grant work plan was completed and the grant with BWSR was fully executed in early May 2020. The project and the grant award was the subject of an article in the Southwest Journal in February: <https://www.southwestjournal.com/voices/green-digest/2020/02/state-awards-grant-to-bryn-mawr-runoff-project/>. In September 2020, Minneapolis and MPRB staff met to review the implementation agreement and maintenance roles.

BCWMC developed options for contracting and implementation which were presented at the November meeting. At that meeting staff was directed to develop a memorandum of understanding or agreement among BCWMC, MPRB, and city of Minneapolis to recognize and assign roles and responsibilities for implementation more formally. The draft agreement was developed over several months and multiple conversations among the parties. At the May 2021 meeting the Commission approved to waive potential conflict of the Commission legal counsel and reviewed a proposal for project design by the Commission Engineer. The updated design proposal and the design agreement among all three parties were approved at the June 2021 meeting. Four public open houses were held in the park in 2021 to gather input on park concepts. Project partners met regularly throughout design to discuss schedules, planning and design components, and next steps. Concept designs were approved by the MRPB Board in late 2021. Staff met with MnDOT regarding clean out of Penn Pond and continue discussions. 50% design plans were approved by the Commission at the January 2022 meeting; 90% design plans were approved at the March 2022 meeting along with an agreement with MPRB and Minneapolis for construction. The agreement was approved by all three bodies. Commission Engineers finalized designs and assisted with bidding documents. Bids were returned in early August. At the meeting in August, the Commission approved moving forward with project construction (through MPRB), and approved a construction budget (higher than previously budgeted) and an amended engineering services budget. MPRB awarded the construction contract. In late November the contractor began the initial earthwork and started on portions of the stormwater pond excavations. By late December the 1st phase of construction was complete with the ponds formed and constructed. The contractor began driving piles in late January and began installing underground piping in early February. At the March meeting, the Commission approved an increase to the engineering services budget and learned the construction budget is currently tracking well under budget. The change order resulting from the City of Minneapolis' request to replace a city sewer pipe resulted in extra design/engineering costs that were approved by the Administrator so work could continue without delays. The MPRB will reimburse the Commission for those extra costs and will, in-turn, be paid by the city. In early May construction was focused in the Morgan / Laurel intersection. The bulk of the right-of-way storm sewer work is now complete; this includes the rerouting of some of the existing storm infrastructure and installation of the stormwater diversion structures. Additional grading around the ponds is currently underway. Project website:

<http://www.bassettcreekwmo.org/projects/all-projects/bryn-mawr-meadows-water-quality-improvement-project>

2020 Jevne Park Stormwater Improvement Project (ML-21) Medicine Lake (No change since April): At their meeting in July 2018, the Commission approved a proposal from the Commission Engineer to prepare a feasibility study for this project. The study got underway last fall and the city's project team met on multiple occasions with the Administrator and Commission Engineer. The Administrator and Engineer also presented the draft feasibility study to the Medicine Lake City Council on February 4, 2019 and a public open house was held on February 28th. The feasibility study was approved at the April Commission meeting with intent to move forward with option 1. The city's project team is continuing to assess the project and understand its implications on city finances, infrastructure, and future management. The city received proposals from 3 engineering firms for project design and construction. At their meeting on August 5th, the Medicine Lake City Council voted to continue moving forward with the project and negotiating the terms of the agreement with BCWMC. Staff was directed to continue negotiations on the agreement and plan to order the project pending a public hearing at this meeting. Staff continues to correspond with the city's project team and city consultants regarding language in the agreement. The BCWMC held a public hearing on this project on September 19, 2019 and received comments from residents both in favor and opposed to the project. The project was officially ordered on September 19, 2019. On October 4, 2019, the Medicine Lake City Council took action not to move forward with the project. At their meeting in October 2019, the Commission moved to table discussion on the project. The project remains on the 2020 CIP list. In a letter dated January 3, 2022, the city of Medicine Lake requested that the Commission direct its engineer to analyze alternatives to the Jevne Park Project that could result in the same or similar pollutant removals and/or stormwater storage capacity. At the March meeting, the Commission directed the Commission Engineer to prepare a scope and budget for the alternatives analysis which were presented and discussed at the April meeting. No action was taken at that meeting to move forward with alternatives analysis. Project webpage: <http://www.bassettcreekwmo.org/index.php?cid=467>.

2014 Schaper Pond Diversion Project and Carp Management, Golden Valley (SL-3) (No change since April): Repairs to the baffle structure were made in 2017 after anchor weights pulled away from the bottom of the pond and some vandalism occurred in 2016. The city continues to monitor the baffle and check the anchors, as needed. Vegetation around the pond was planted in 2016 and a final inspection of the vegetation was completed last fall. Once final vegetation has been completed, erosion control will be pulled and the contract will be closed. The Commission Engineer began the Schaper Pond Effectiveness Monitoring Project last summer and presented results and recommendations at the May 2018 meeting. Additional effectiveness monitoring is being performed this summer. At

the July meeting the Commission Engineer reported that over 200 carp were discovered in the pond during a recent carp survey. At the September meeting the Commission approved the Engineer's recommendation to perform a more in-depth survey of carp including transmitters to learn where and when carp are moving through the system. At the October 2020 meeting, the Commission received a report on the carp surveys and recommendations for carp removal and management. Carp removals were performed through the Sweeney Lake Water Quality Improvement Project. Results were presented at the February 2021 meeting along with a list of options for long term carp control. Commission took action approving evaluation of the long-term options to be paid from this Schaper Pond Project. Commission and Golden Valley staff met in March 2021 to further discuss pros and cons of various options. At the September 2021 meeting, the Commission approved utilizing an adaptive management approach to carp management in the pond (\$8,000) and directed staff to discuss use of stocking panfish to predate carp eggs. Commission Engineers will survey the carp in 2022. At the April meeting, the Commission approved panfish stocking in Schaper Pond along with a scope and budget for carp removals to be implemented later in 2022 if needed. Commission staff informed lake association and city about summer activities and plans for a fall alum treatment. Approximately 1,000 bluegills were released into Schaper Pond in late May. Carp population assessments by electroshocking in Sweeney Lake and Schaper Pond were completed last summer. A report on the carp assessment was presented in January. Monitoring in Schaper Pond in 2023 and a reassessment of carp populations in 2024 were approved in early 2023. Carp box netting in 2024 is also approved, as needed. Project webpage: <http://www.bassettcreekwmo.org/index.php?cID=277>.

Sweeney Lake Water Quality Improvement Project, Golden Valley (SL-8) (No change since Feb 2023): This project was added to the 2020 CIP list after receiving a federal 319 grant from the MPCA. It is partially a result of the carp surveys completed through the Schaper Pond Diversion Project and a study of the year-round aeration on Sweeney Lake. This project will treat curly-leaf pondweed in spring 2020, will remove carp in summer 2020, and will perform an alum treatment on Sweeney Lake in late summer 2020. The project was officially ordered by the Commission after a public hearing in September 2019. A public open house on this project was held via Webex on April 8th with approximately 20 people joining. The open house presentation and a question and answer document are available online. The curly-leaf pondweed herbicide treatment was completed in May. Carp Solutions performed carp tracking and setting nets in early June. The first round of netting resulted in 334 carp removed from Sweeney Lake (mean length 620 mm, mean weight 3.1 kg), representing an estimated 29% of the total population. From Schaper Pond 82 carp removed which likely represents about 17% of the initial population. After another round of carp removals in late July, 118 additional carp were netted from Sweeney. Based on preliminary estimates, approximately 40% of the carp population was removed from Sweeney this summer. The carp biomass was reduced from approximately 129 kg/ha to 79 kg/ha, which is below the threshold where adverse impacts on water quality are expected. The first round of alum treatment was completed in late October. A grant report and payment request were submitted at the end of January. A report on the results of the carp removals and recommendations for future management were presented at the February 2021 meeting. Long term carp management evaluation will happen through the Schaper Pond Diversion Project funding. A one-page overview of 2020 activities and outcomes was developed for the Sweeney Lake Association and [posted online](#) in March. This year, the Commission is continuing carp population assessments and performing an alum treatment this fall. At the September meeting the Commission awarded a contract for the alum treatment. The treatment was completed the week of October 16th. Post treatment water quality results were presented in January and an interim grant report, budget update, and invoice to MPCA were submitted by February 1st. The lake is slated to be removed from the impaired waters list in 2024. This project and all reporting will be complete early this year. Project website: [Sweeney Lake Water Quality Improvement Project, SL-8](#)).

2014 Twin Lake In-lake Alum Treatment, Golden Valley (TW-2): (No change since June 2018) At their March 2015 meeting, the Commission approved the project specifications and directed the city to finalize specifications and solicit bids for the project. The contract was awarded to HAB Aquatic Solutions. The alum treatment spanned two days: May 18- 19, 2015 with 15,070 gallons being applied. Water temperatures and water pH stayed within the desired ranges for the treatment. Early transparency data from before and after the treatment indicates a change in Secchi depth from 1.2 meters before the treatment to 4.8 meters on May 20th. There were no complaints or comments from residents during or since the treatment.

Water monitoring continues to determine if and when a second alum treatment is necessary. Lake monitoring results

from 2017 were presented at the June 2018 meeting. Commissioners agreed with staff recommendations to keep the CIP funding remaining for this project as a 2nd treatment may be needed in the future. Project webpage: <http://www.bassettcreekwmo.org/index.php?clD=278>.

2013 Four Seasons Area Water Quality Project (NL-2) (No change since January): At their meeting in December 2016, the Commission took action to contribute up to \$830,000 of Four Seasons CIP funds for stormwater management at the Agora development on the old Four Seasons Mall location. At their February 2017 meeting the Commission approved an agreement with Rock Hill Management (RHM) and an agreement with the City of Plymouth allowing the developer access to a city-owned parcel to construct a wetland restoration project and to ensure ongoing maintenance of the CIP project components. At the August 2017 meeting, the Commission approved the 90% design plans for the CIP portion of the project. At the April 2018 meeting, Commissioner Prom notified the Commission that RHM recently disbanded its efforts to purchase the property for redevelopment. In 2019, a new potential buyer/developer (Dominium) began preparing plans for redevelopment at the site. City staff, the Commission Engineer and I have met on numerous occasions with the developer and their consulting engineers to discuss stormwater management and opportunities with “above and beyond” pollutant reductions. Concurrently, the Commission attorney has been working to draft an agreement to transfer BCWMC CIP funds for the above and beyond treatment. At their meeting in December, Dominium shared preliminary project plans and the Commission discussed the redevelopment and potential “above and beyond” stormwater management techniques. At the April 2020 meeting, the Commission conditionally approved the 90% project plans. The agreements with Dominium and the city of Plymouth to construct the project were approved May 2020 and project designers coordinated with Commission Engineers to finalize plans per conditions. In June 2021, the City of Plymouth purchased the property from Walmart. The TAC discussed a potential plan for timing of construction of the stormwater management BMPs by the city in advance of full redevelopment. At the August 2021 meeting, the Commission approved development of an agreement per TAC recommendations. The city recently demolished the mall building and removed much of the parking lot. At the December meeting the Commission approved the 90% design plans and a concept for the city to build the CIP project ahead of development and allow the future developer to take credit for the total phosphorus removal over and above 100 pounds. Negotiations on an agreement between the city and BCWMC are on-going. Project webpage: <http://www.bassettcreekwmo.org/index.php?clD=282>.

2021 Parkers Lake Drainage Improvement Project (PL-7) (No change since July): The feasibility study for this project was approved in May 2020 with Alternative 3 being approved for the drainage improvement work. After a public hearing was held with no public in attendance, the Commission ordered the project on September 17, 2020 and entered an agreement with the city of Plymouth to design and construct the project. The city hired WSB for project design which is currently underway. 60% design plans were approved at the June meeting. 90% plans were approved at the August meeting. Construction is complete and vegetation is currently being established. www.bassettcreekwmo.org/projects/all-projects/parkers-lake-drainage-improvement-project

2021 Parkers Lake Chloride Reduction Project (PL-7) (No change since October): The feasibility study for this project was approved in May 2020 with Alternative 3 being approved for the drainage improvement work. After a public hearing was held with no public in attendance, the Commission ordered the project on September 17, 2020 and entered an agreement with the city of Plymouth to implement the project in coordination with commission staff. City staff and I have had an initial conversation about this project. The city plans to collect additional chloride data this winter in order to better pinpoint the source of high chlorides loads within the subwatershed. Partners involved in the Hennepin County Chloride Initiative (HCCI) are interested in collaborating on this project. A proposal from Plymouth and BCWMC for the “Parkers Lake Chloride Project Facilitation Plan” was approved for \$20,750 in funding by the HCCI at their meeting in March. The project will 1) Compile available land use data and chloride concentrations, 2) Develop consensus on the chloride sources to Parkers Lake and potential projects to address these sources, and 3) Develop a recommendation for a future pilot project to reduce chloride concentrations in Parkers Lake, which may be able to be replicated in other areas of Hennepin County, and 4) help target education and training needs by landuse. A series of technical stakeholder meetings were held last fall and winter to develop recommendations on BMPs. A technical findings report was presented at the July 2022 meeting. At the September meeting, the Commission approved a scope and budget for a study of the feasibility of in-lake chloride reduction activities. That study is now underway by the Commission Engineer. Additionally, the city is sampling the stormwater pond at their maintenance facility. Project website: www.bassettcreekwmo.org/projects/all-projects/parkers-lake-drainage-improvement-project

2021 Mt. Olivet Stream Restoration Project (ML-20) (No change since July): The feasibility study for this project was approved in May 2020 with Alternative 3 being approved for the drainage improvement work. After a public hearing was held with no public in attendance, the Commission ordered the project on September 17, 2020 and entered an agreement with the city of Plymouth to design and construct the project. The city hired WSB for project design which is currently underway. 60% design plans were approved in June. 90% plans were approved at the August. Construction is complete and vegetation is currently being established. www.bassettcreekwmo.org/projects/all-projects/mt-olivet-stream-restoration-project

2021 Main Stem Lagoon Dredging Project (BC-7) (See Item 6C): The feasibility study for this project was approved in May 2020 with Alternative 2-all (dredge all three lagoons to 6-foot depth) being approved. After a public hearing was held with no public in attendance, the Commission ordered the project on September 17, 2020. Rather than entering an agreement with a separate entity to design and construct this project, the Commission will implement the project in close coordination with the MPRB. At their meeting in November, the Commission approved a timeline for implementation and the Commission Engineer was directed to prepare a scope of work for project design and engineering. The engineering scope and budget were approved at the May 2021 meeting. Design and permitting got underway in summer 2021. Dredging of all three lagoons is planned for winter 2022/2023. A grant agreement for the \$250,000 Watershed Based Implementation Funding grant was approved at the January 2021 meeting. The project work plan was approved by BWSR. In the spring 2021 the Commission approved a grant agreement for a Hennepin County Opportunity Grant for this project. An Environmental Assessment Worksheet was approved by the Commission at their October 2021 meeting and was submitted for a 30-day comment period by the City of Golden Valley as the RGU. A meeting of project stakeholders was held December 7th and 50% designs were approved at the December 2021 meeting. Comments were received on the EAW from multiple review agencies and one private citizen. Agency comments were relatively minor and expected. Comments from the citizen were more complex and detailed. Responses to comments were developed the RGU (city of Golden Valley) made an official declaration that no Environmental Impact Statement is needed. Staff reviewed a request from a resident to add "safety" benches to the ponds, reviewed reference materials and discussed in detail with MPRB. Determined safety benches aren't appropriate or needed for this project and responded to the resident. 90% plans were approved at the June meeting. A project flyer and FAQs page were developed in conjunction with MPRB staff. They are posted on the webpage and were distributed to MPRB and Loppet staff at the Chalet and Trailhead. At the October meeting the Commission awarded the construction contract to the lowest responsive, responsible bidder: Fitzgerald Excavating and Trucking and contract documentation was completed thereafter. A pre-construction meeting was held November 28th. Dredging began in January and was completed in March 2023. Two pay requests from the contractor have been approved. Site restoration should get underway soon. A project update and recommendation to close out the construction contract is on this month's agenda. Project website: www.bassettcreekwmo.org/projects/all-projects/bassett-creek-main-stem-lagoon-dredging-project

2022 Medley Park Stormwater Treatment Facility (ML-12): The feasibility study for this project is complete after the Commission Engineer's scope of work was approved last August. City staff, Commission Engineers and I collaborated on developing materials for public engagement over the fall/early winter. A project kick-off meeting was held in September, an internal public engagement planning meeting was held in October, and a Technical Stakeholder meeting with state agencies was held in November. A [story map of the project](#) was created and a survey to gather input from residents closed in December. Commission Engineers reviewed concepts and cost estimates have been reviewed by city staff and me. Another public engagement session was held in April to showcase and receive feedback on concept designs. The feasibility report was approved at the June meeting with a decision to implement Concept #3. At the July meeting the Commission directed staff to submit a Clean Water Fund grant application, if warranted. A grant application was developed and submitted. Funding decisions are expected in early December. A public hearing on this project was held in September with no members of the public attending. In September, a resolution was approved to officially order the project, submit levy amounts to the county, and enter an agreement with the city to design and construct the project. The city hired Barr Engineering to develop the project designs which are now underway. The BCWMC received a \$300,000 Clean Water Fund grant from BWSR in December 2021 and the grant agreement approved in March 2022. 50% design plans were approved in February 2022 and 90% plans were approved at the May 2022 meeting. Final plans and bid documents were developed by the city's consultation (Barr Engineering). Construction began in November and winter construction was finished in late January 2023. Activities this spring include completing grading (topsoil adjustments); paving (concrete, bituminous); light pole and fixture install; benches install; site clean up and prep for restoration contractor. Restoration contractor starting no later than June 1. www.bassettcreekwmo.org/projects/all-projects/medley-park-stormwater-treatment-facility

2022 SEA School-Wildwood Park Flood Reduction Project (BC-2, 3, 8, 10) (No change since March): The feasibility study for this project is complete after the Commission Engineer’s scope of work was approved last August. A project kick-off meeting with city staff was held in late November. Meetings with city staff, Robbinsdale Area School representatives, and technical stakeholders were held in December, along with a public input planning meeting. A virtual open house video and comment form were offered to the public including live chat sessions on April 8th. The feasibility study report was approved in June with a decision to implement Concept #3. A public hearing on this project was held in September with no members of the public attending. In September, a resolution was approved to officially order the project, submit levy amounts to the county, and enter an agreement with the city to design and construct the project. The city hired Barr Engineering to develop the project designs which are now underway. A virtual public open house was held February 3rd. 50% Design Plans were approved at the January meeting. A public open house was held September 29th. 90% were approved at the October Commission meeting. Six construction bids were received in late February with several of them under engineer’s estimates. Rachel Contracting was the low bidder and the City will be recommending Rachel Contracting to the City Council at the March 7 city council meeting. Construction is anticipated to begin in late March or early April 2023. Two additional bids and contracts are coming later this year for site restoration and replacing the outlet from DeCola Pond D to DeCola Pond E. Project webpage: www.bassettcreekwmo.org/projects/all-projects/sea-school-wildwood-park-flood-reduction-project.

2024 CIP Projects: Feasibility Studies Underway for

[Bassett Creek Restoration Project: Regent Ave. to Golden Valley Rd. \(2024 CR-M\)](#)

A public open house was held March 1st with 30 residents attending. The draft feasibility report was presented at the April meeting. A final report will be presented in June.

[Ponderosa Woods Stream Restoration Project, Plymouth \(ML-22\) \(See Item 6A\)](#)

A public open house was held February 13th with 3 residents attending. The draft feasibility report will be presented at this meeting.

Administrator Report April 13 – May 9, 2023

Subject	Work Progress
CIP	<ul style="list-style-type: none"> • <u>Main Stem Lagoon Dredging Project</u>: Reviewed information related to post construction surveys, total dredged material amounts, and options for closing out project. • <u>Main Stem Restoration Project Regent Ave to Golden Valley Road Project</u>: Reviewed and provided comments on draft feasibility study report • <u>Ponderosa Woods Stream Restoration Project</u>: Discussed buckthorn removal costs and options with Plymouth staff and Commission Engineers; reviewed and provided comments on additional options for implementation • <u>Bryn Mawr Meadows Water Quality Project</u>: Submitted invoices to MPRB for additional design expenses related to new city storm sewer • <u>Sochacki Park Water Quality Improvement Project</u>: Corresponded with Commissioner Welch, Commission Attorney and partners on the draft MOU; assisted with on-camera interview on the project with CCX Media
Bassett Creek Tunnel	<ul style="list-style-type: none"> • Met with Commission Engineer and Attorney to review draft agreement with Minneapolis tunnel inspections, maintenance, development reviews, and emergency response
Education & West Metro Water Alliance	<ul style="list-style-type: none"> • Attended May WMWA meeting • Discussed options for incorporating Low Salt, No Salt MN campaign with MPCA programs • Coordinated volunteers and attended Loppet Sustainability Fair • Inventoried and photographed educational displays and materials • Participated in interviews of candidates for new shared educator position between WMWA and

(WMWA)	<p>Hennepin County</p> <ul style="list-style-type: none"> • Reviewed and commented on Crystal dog park interpretive sign • Coordinated with Met Council and St. Louis Park staff re: Westwood Lake CAMP volunteer; delivered monitoring materials
Administration	<ul style="list-style-type: none"> • Developed agenda; reviewed invoices and submitted expenses spreadsheet to Redpath; developed Administrator’s report; reviewed bank statements, investment statements and financial report; drafted April meeting minutes; reviewed memos, documents and presentations for Commission meeting; printed and disseminated meeting information to commissioners, staff, and TAC; updated online calendar; drafted meeting follow up email; ordered catering for May Commission meeting • Developed agenda and materials for Administrative Services Committee meeting • Prepared recommended changes to Roles and Responsibilities document • Worked to set second Administrative Services Committee meeting • Assisted with gathering information for 2022 financial audit • Reviewed agreement with Met Council for 2023 CAMP program and submitted to Commission Attorney for review • Continued to refine draft 2024 Operating Budget and gather information on investment income history and allocations • Set, prepared for, and participated in Budget Committee meeting; drafted meeting notes • Drafted Budget Committee memo and policy recommendations; set to committee members for review • Participated in orientation meeting with new Commissioner Twifold • Participated in meeting of women watershed administrators and worked to arrange next meeting • Gathered comments on Minor Plan Amendment • Attended MPCA’s meeting on water quality assessments in Mississippi River Watershed – Metro area • Met with MCWD staff, Plymouth staff and Commission engineer re: project on Minnehaha Creek WD-BCWMC boundary • Completed MCES right of entry form and discussed with Commission Attorney and MCES staff • Corresponded with Plymouth resident regarding impacts to wetlands and wildlife from redevelopment project; corresponded with Plymouth staff and Commission Engineer regarding same • Corresponded with Medicine Lake commissioners and consultants re: Jevne Park improvements and possible use of CIP funds • Write annual report
MAWD	<ul style="list-style-type: none"> • Attended Metro Watersheds April 18th meeting • Reviewed draft MAWD Handbook and participated in short Handbook Committee meeting
Grant Work	<ul style="list-style-type: none"> • Reviewed and submitted progress report on Lawns to Legumes grant (implemented through Metro Blooms)
2025 Watershed Management Plan	<ul style="list-style-type: none"> • Met with Commission Engineers for bi-weekly check in meetings and updated task list • Set first Plan Steering Committee meeting